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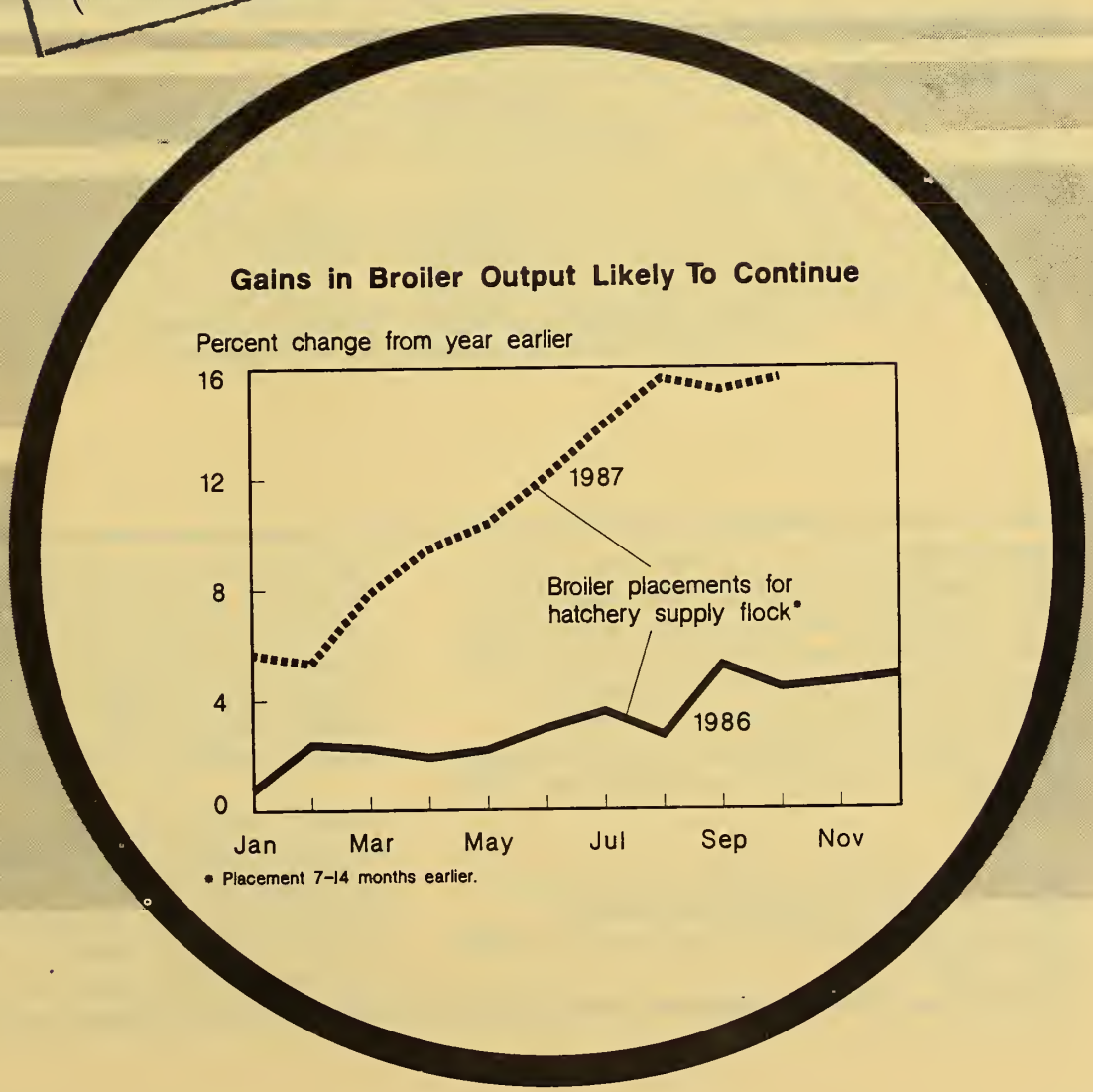

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The present forecasts will be updated in the World Agricultural Supply and Demand Estimates scheduled for release on June 9 and July 7, 1987.

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SUMMARY

Livestock and poultry producers are expected to have positive returns in 1987. Large supplies of grain, protein meal, and forage should moderate production costs. However, the fifth consecutive year of record-large total meat supplies probably will keep poultry and pork prices at or below last year's average. Reduced beef supplies should firm or improve prices received by many cattle producers in 1987.

Favorable feeding margins are likely to stimulate broiler, turkey, and hog production the most, with the cattle herd beginning to stabilize. Broiler production in the first quarter was up 9 percent. The broiler hatchery supply flock will be 10 to 15 percent above last year this spring and summer, permitting continued production increases. Broiler output could increase nearly 9 percent this year with prices averaging in the upper 40-cent-per-pound range this summer and seasonally lower in the fall.

Turkey production during second-half 1987 could slow from the first half's year-to-year increase of around 20 percent. Turkey production during 1987 may be 17 percent above last year. Wholesale hen turkey prices may average 65 to 70 cents per pound during the last half of the year, down from 79 cents a year earlier.

The March *Hogs and Pigs* report indicated that producers are expanding their breeding inventories. Pork probably will show a 1- to 3-percent year-to-year decline during the first half, with second-half production expanding 7 to 9 percent. For all of 1987, commercial pork production is expected to rise 3 percent. Barrow and gilt prices at the seven major markets may average $46 to $50 per cwt for the year, compared with $51 in 1986. Prices are expected to average in the high $40's to low $50's in the second and third quarters, then drop to the low to mid $40's in the fourth quarter.

Fed cattle prices rallied into the low $70's per cwt in April as supplies tightened. Second-quarter beef production could be down a tenth. Nonfed cattle slaughter is expected to decline more sharply than fed cattle slaughter. Beef production is expected to be down 5 to 7 percent in 1987. Large supplies of competing meats will place downward pressure on fed beef prices. Choice steer prices are projected in the low to mid $60's for the last half of the year.

Egg production in 1987 is likely to expand by about 1 percent with lower production costs. Most of the expansion will be due to a larger flock. Prices in the second half may range from the mid to upper 60 cents per dozen, down from 73 cents in 1986.

FACTORS AFFECTING LIVESTOCK AND POULTRY

Livestock and poultry producers are expected to have positive returns in 1987. Large supplies of grain, protein meal, and forage should moderate production costs. However, the fifth consecutive year of record large total meat supplies probably will keep poultry and pork prices at or below last year's average. Reduced beef supplies should firm or improve prices received by many cattle producers in 1987.

Economic Conditions Cloudy

The economy grew 4.3 percent during first-quarter 1987 as measured by the Gross

Table 1--Livestock, poultry, and egg production and prices

(All percent changes shown are from a year earlier.)

Item	1985	1986			1987 1/			
	Annual	III	IV	Annual	I	II 1/	III 1/	Annual
				Million pounds				
PRODUCTION								
Beef	23,557	6,273	5,925	24,213	5,755	5,625	5,825	22,805
% change	+1	+1	+3	+3	0	-7	-5	-6
Pork	14,728	3,237	3,623	13,998	3,540	3,475	3,525	14,415
% change	0	-9	-5	-5	-1	-3	+9	+3
Lamb & mutton	352	81	82	331	76	77	76	309
% change	-5	-5	-10	-6	-16	-1	-6	-7
Veal	499	129	122	509	114	100	105	439
% change	+4	+2	-9	+2	-12	-22	-19	-14
Total red meat	39,136	9,720	9,752	39,051	9,485	9,277	9,531	37,968
% change	0	-2	-1	-	-1	-2	-1	-7
Broilers 2/	13,569	3,620	3,558	14,265	3,728	3,970	3,950	15,498
% change	+4	+4	+6	+5	+9	+8	+9	+9
Turkeys 2/	2,800	938	921	3,133	668	855	1,090	3,663
% change	+9	+10	+10	+14	+20	+19	+16	+17
Total poultry 3/	16,871	4,683	4,602	17,929	4,528	4,965	5,155	19,666
% change	+5	+5	+7	+6	+10	+9	+10	+10
Total red meat & poultry	56,007	14,403	14,354	56,980	14,013	14,242	14,686	57,634
% change	+2	0	+2	+2	+3	-2	+2	+1
				Million dozen				
Eggs	5,688	1,413	1,457	5,715	1,442	1,440	1,430	5,792
% change	0	0	+1	0	+1	+1	+1	+1
PRICES								
				Dollars per cwt				
Choice steers, Omaha, 900-1100 lb	58.37	58.91	60.36	57.75	60.50	63-67	62-66	61-65
Barrows & gilts, 7 mkts	44.77	61.13	53.08	51.19	48.11	48-52	48-52	46-50
Slaugh. lambs, Ch., San Ang.	68.61	69.45	66.13	69.46	77.50	79-83	73-77	74-78
				Cents per pound				
Broilers, 12-city avg. 4/	50.8	66.6	56.2	56.9	50.0	47-51	45-51	45-51
Turkeys, NY 5/	75.5	79.8	78.3	72.2	58.0	55-59	62-68	59-66
				Cents per dozen				
Eggs New York 6/	66.5	72.8	74.0	71.1	64.8	59-63	61-67	61-68

1/ Forecast. 2/ Federally inspected. 3/ Includes broilers, turkeys, and mature chickens. 4/ Wholesale weighted average. 5/ Wholesale, 8- to 16-pound young hens. 6/ Cartoned, consumer Grade A large, sales to volume buyers.

National Product (GNP). However, the growth resulted from an inventory buildup and an improvement in the net export deficit while consumer sales, business investment, and new home construction dropped. The net export deficit improved for the second consecutive quarter, but the gain was due largely to falling imports, not rising exports. Real GNP growth is expected to be between 2.5 and 3.5 percent in 1987, up slightly from 2.4 percent in 1986.

Even with improved GNP growth in 1987, the outlook for meat demand remains cloudy. The drop in consumer spending in the first quarter of 1987, coupled with reduced business investment and new home construction, should dampen any real growth in meat expenditures. Consumers may need to further reduce debt costs and increase discretionary income before any real increase in meat expenditures occurs.

Meat Supplies Remain Record Large

Red meat and poultry supplies are expected to be record large in 1987. Per capita retail weight consumption of red meat and poultry is expected to be about 216 pounds, up slightly from 1986. The increase continues a trend begun in 1982. Projected red meat and poultry consumption in 1987 is 12 pounds per person above the 1970–85 average. First–half supplies should be at or slightly below first–half 1986 levels. However, second–half production of red meat and poultry should be above a year ago.

Poultry production is expected to increase 8 to 10 percent in 1987. This expansion is expected to continue throughout the year. Pork production should be 1 to 3 percent below the first–half 1986 level, with second–half output 5 to 7 percent above 1986. Beef production is expected to be down about 5 to 7 percent in 1987. First–quarter production was about even with a year ago, but supplies are expected to be 6 to 8 percent lower during the rest of the year.

Expected positive returns for many poultry and hog producers in 1987 from lower feed costs will encourage expanded production despite slightly lower prices. Stabilized beef cattle inventories, and expanded pork and poultry production, are likely to keep total future meat supplies near record levels.

Feed Costs Remain Low

Large grain stocks, coupled with lower loan rates and large forage supplies, should reduce feed costs below year–earlier levels. Use of feed grains in 1986/87 is expected to be above 1985/86. Ending stocks should be about a record 159.1 million metric tons in 1986/87. Exports of U.S. feed grains are expected to increase. However, world coarse grain ending stocks are expected to increase from already high levels, keeping downward pressure on prices.

U.S. soybean meal prices should remain at year–ago levels, and average $145 to $150 per ton in the 1986/1987 crop year. Both domestic use and exports are expected to increase, but the increase will be offset by larger production, leaving ending stocks above a year ago.

Forage supplies continue to be large in many areas. Subsoil moisture conditions in the Pacific Northwest, eastern Corn Belt, and parts of the Southeast are below normal. The western Corn Belt, High Plains, Southwest, and parts of the Southeast are all at or above normal levels. This is reflected in the lower hay prices received by farmers. The April 1987 price received for all hay was $62.90 per ton, compared with $66.20 in 1986.

Prospective Plantings Reflect High Program Participation

The 1987/88 grain crop is likely to be down from 1986/87 levels as reflected in planting intentions as of March 1. Corn acreage intentions were down 12 percent from 1986 and reflect a high program participation rate. Other feed grain planting intentions also were down, with barley down 16 percent and sorghum down 23 percent. Soybean prospective planting acreage was down 7 percent, to the smallest acreage since 1976. Despite the reduction in acreage, feed grain supplies for the 1987/88 crop year appear to be adequate given the large stocks. Hay acreage intended for harvest declined 2 percent from 1986 levels, reflecting record hay production in 1986. Hay stocks on December 1, 1986, were 26 percent above the January 1, 1986 levels. Large hay stocks, coupled with relatively low cattle numbers, should result in lower hay prices in 1987.

POULTRY AND EGGS

Because of relatively low costs, producers of broilers, turkeys, and eggs are all increasing production in 1987 from a year earlier. The additional production will likely result in lower prices than last year.

Eggs

Favorable producer returns and a relatively young laying flock in most of 1987 are expected to result in a 1-percent increase in production from a year earlier. Abundant supplies of other high-protein foods are likely to keep eggs relegated to breakfast-type meals. Thus, demand probably will not be strengthened from competing meats and prices in 1987 are expected to be below last year.

Table 2--Layers on farms and eggs produced, 1986-87 1/

Quarters	Number of layers		Eggs per layer		Eggs produced	
	1986	1987	1986	1987	1986	1987
	- Millions -		- Number -		Million dozen	
I	280	283	60.9	60.9	1,421.9	1,435.9
II	277		62.7		1,446.8	
III	273		62.4		1,418.0	
IV	278		61.5		1,422.8	
Annual	277		247.5		5,709.5	

1/ Marketing year beginning December 1.

Producers Expand Laying Flocks

Egg production during January-March, at 1,442 million dozen, was 1 percent above a year earlier. Nearly all the increase was from the larger laying flock as productivity was down 1 percent from a year ago. The largest monthly increase occurred in March. The number of hens in the 20 major producing States was up nearly 2 percent and eggs per layer were nearly 1 percent larger than last year. As a result, egg production was up a little over 2 percent for the month. The increase in the number of hens and the larger number of eggs were likely a response to the expected seasonal increase in the quantity of eggs needed for Easter sales. Even though Easter was late this year, producers may have begun holding back hens from slaughter to produce extra eggs. In 1986, egg producers began slaughtering old hens in March but this year, weekly slaughter was above last year beginning in early April.

Sales of light-type hens are expected to be near a year ago through May. However, with fewer replacement hens available through the summer, producers may not sell as many old birds as last year. The light-type hatch was up 7 percent in March and these chicks will contribute to egg supplies in August, when seasonal demand usually increases. Producers usually increase force molting after Easter but

Table 3--Force moltings and light-type hen slaughter, 1985-87

Month	Force molted layers 1/						Light-type hens slaughtered under Federal inspection 2/		
	Being molted			Molt completed					
	1985	1986	1987	1985	1986	1987	1985	1986	1987
	- - - - Percent - - - -						- - - Thousands - - -		
January	2.3	3.6	4.2	17.8	25.2	20.9	18,928	13,890	13,003
February	4.6	4.8	4.6	16.6	23.5	19.1	13,674	12,221	13,196
March	3.8	4.2	3.8	15.6	24.4	20.1	13,311	14,201	13,345
April	3.0	2.8	2.8	15.6	24.0	19.6	13,819	14,761	
May	5.6	5.4		14.6	22.1		12,336	13,309	
June	6.0	4.4		16.0	22.8		9,079	14,886	
July	5.4	5.4		19.1	21.9		9,774	12,399	
August	4.4	3.9		20.3	21.4		10,204	11,700	
September	4.9	3.9		21.2	20.8		9,317	11,231	
October	5.8	4.7		21.6	20.2		9,336	12,472	
November	5.3	4.2		23.6	20.7		9,170	10,019	
December	3.2	2.5		25.2	22.0		13,127	13,006	

1/ Percent of hens and pullets of laying age in 17 selected States. 2/ Revisions include data from late reports or other corrections developed by the Food Safety and Inspection Service.

Table 4--Egg-type chick hatchery operations, 1985-1987

Month	Hatch			Eggs in incubator first of month		
	1985	1986	1987	1985	1986	1987
	- - Thousands - -			- - Percent - -		
Jan.	28,289	34,538	34,175	-20	+13	+5
Feb.	28,419	34,826	35,176	-24	+25	+4
Mar.	36,923	39,523	42,339	-23	+11	+5
Apr.	40,873	42,359		-17	+5	-2
May	38,967	42,465		-19	+5	
June	33,838	37,253		-26	+6	
July	32,094	33,575		-18	+10	
Aug.	32,503	33,382		-11	+2	
Sept.	33,568	32,638		0	-2	
Oct.	33,593	32,444		+7	-3	
Nov.	33,606	27,456		+15	-19	
Dec.	34,164	33,262		+25	-4	

may do more this year than last when they had replacement pullets ordered to enter the flocks.

Slightly Increased Egg Production To Continue

If producers force-molt more of their hens this year than last as expected, the number of hens will continue above last year. However, egg supplies will be down seasonally as the hens are in molt for 6 to 8 weeks. During the summer, producers are expected to rotate molting among their various flocks to continue egg production above last year's pace, but at a lower quantity than in the first quarter. Production in the remainder of 1987 is expected to be about 1 percent above last year, as producers keep more of their hens.

Even with increased egg supplies and little likelihood of any price strength, net returns will likely remain positive. Continued low feed costs will keep total costs near present levels. Demand for eggs will likely remain about steady, as plentiful supplies of poultry limit egg substitution for other high-protein foods. The lower dollar relative to some currencies may help exports, but plentiful world egg supplies will likely limit export expansion.

Foreign Trade Declines

During January and February 1987, imports and exports of shell eggs and the shell equivalent of egg products were down from last year. Imports were down 30 percent from 1987 and totaled 1.9 million dozen, shell equivalent. All of the decline was in shell eggs as imports of egg products were larger than last year.

Exports of shell eggs and egg products during January and February 1987 totaled 14 million dozen, down from nearly 18 million last year. The decline was accounted for by Japan, which reduced its imports of U.S. eggs by 4 million dozen, shell equivalent. Although exports to Japan are down thus far in 1987, total exports during the remainder of 1987 are expected to increase and equal 1986.

The stronger Japanese yen relative to the dollar, plus lower prices for eggs, should make U.S. eggs and egg products attractively priced in Japan. Also, the Export Enhancement Program is expected to help keep egg exports near last year. This program helps exporters meet other nations' prices by making up the difference with generic certificates for commodities held by the Commodity Credit Corporation.

Processed Eggs Increase

The number of eggs broken commercially during first-quarter 1987 was 20 percent above last year. Eggs broken are expected to continue above 1986 for the remainder of the year, because of a growing demand for liquid and dried egg products.

Processed Egg Consumption Per Capita Keeps Gaining

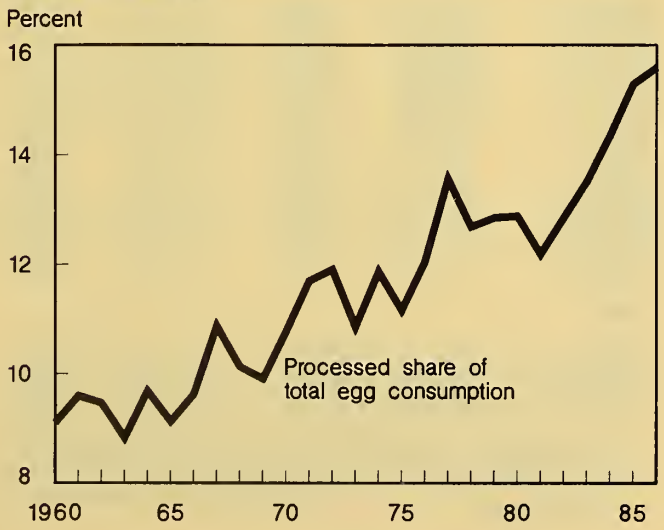


Table 5--Egg prices and price spreads, 1986-87

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
						Cents per dozen							
Farm price 1/													
1986	58.3	54.0	61.4	49.2	48.8	42.1	51.9	55.3	55.4	50.3	60.0	58.3	53.8
1987	51.5	50.0	46.0	46.5									
New York (cartoned) 2/ Grade A, large													
1986	73.3	68.3	80.8	65.7	65.2	59.2	73.0	72.8	72.6	69.6	77.2	75.5	71.1
1987	67.1	65.2	62.0	62.4									
4-region average, Grade A, large Retail price													
1986	90.1	86.6	88.7	89.0	82.0	79.5	83.3	91.3	86.8	85.5	89.7	91.0	87.0
1987	86.2	82.3	80.0										
Price spreads Retail-to-consumer													
1986	14.9	17.2	10.0	21.9	16.8	20.5	12.1	18.8	14.3	15.4	11.7	14.4	15.7
1987	17.4	14.5	16.5										
						1967=100							
Consumer price index													
1986	194.4	186.7	190.8	188.8	173.7	166.9	175.2	192.9	186.0	186.2	195.8	198.6	186.3
1987	193.2	187.4	180.0										

1/ Market (table) eggs including eggs sold retail by the producer; data not available prior to 1982.
2/ Price to volume buyers.

Table 6--Shell eggs broken and egg products produced under Federal inspection, 1986-87

Period	Shell eggs broken	Egg products produced 1/		
		Liquid 2/	Frozen	Dried
	Thou. doz.	Thou. lbs.	Thou. lbs.	Thou. lbs.
1986				
January	67,415	50,206	28,122	6,574
February	61,356	46,368	24,252	6,556
March	59,034	45,856	23,221	5,429
April	74,396	55,105	30,434	7,760
May	74,076	58,477	27,510	8,529
June	78,479	61,323	30,830	7,724
July	78,719	59,815	31,381	7,229
August	74,041	56,353	28,228	7,102
September	72,314	55,668	27,516	6,578
October	80,077	61,450	32,255	8,045
November	63,605	50,759	26,584	6,481
December	73,929	54,255	31,866	8,084
1987				
January	73,724	60,730	29,042	8,981
February	71,122	56,722	27,250	8,159
March	80,467	62,181	31,909	8,725

1/ Includes ingredients added. 2/ Liquid egg products produced for immediate consumption and for processing.

The consumption of further processed eggs other than shell has been increasing in the last few years. With per capita consumption of all eggs declining, the proportion of eggs consumed as egg products has been increasing. With more convenience foods being purchased, increased numbers of eggs are being used by commercial food preparers.

Thus, with more eggs being used commercially and exports of egg products expected to increase, the number of eggs broken under Federal inspection will likely increase. In addition, USDA bought 2 million pounds of dried egg mix (compared with 1.4 million pounds in April 1986) for distribution to needy families and other domestic food programs. The purchase will likely boost the number of eggs broken and with the other processed egg needs, reduce supplies of shell eggs this spring.

Prices To Weaken Seasonally

Egg prices this year have been below last year in response to increased production.

Table 7--Shell eggs: Supply and utilization by quarters, 1985-87 1/

Year	Supply						Utilization				
	Beginning stocks	Production	Hatching use 2/	Eggs broken	Imports	Total supply	Ending stocks	Exports and shipments	Military	Civilian disappearance	
										Total	Per capita 3/
	- - - - Million dozen - - - -										Number
1985 4/											
I	0.9	1,430.5	136.1	182.7	0.9	1,113.5	0.7	13.9	4.4	1,094.5	55.6
II	.7	1,407.5	139.7	216.7	2.3	1,054.1	.6	15.0	5.1	1,033.5	52.4
III	.6	1,407.7	133.7	214.1	1.1	1,061.6	.7	12.9	4.0	1,044.0	52.8
IV	.7	1,442.8	138.6	199.1	4.3	1,110.0	.7	14.2	4.3	1,090.8	55.0
Year	.9	5,688.4	548.1	812.6	8.6	4,337.2	.7	56.0	17.8	4,262.7	215.7
1986 4/											
I	.7	1,423.3	138.5	187.8	3.0	1,100.8	.6	13.0	4.3	1,082.9	54.5
II	.6	1,421.2	144.6	227.0	3.3	1,053.6	1.1	12.4	3.8	1,036.3	52.0
III	1.1	1,413.3	140.9	225.1	1.2	1,049.7	.9	13.5	4.0	1,031.3	51.7
IV	.9	1,458.0	141.1	217.6	3.4	1,103.6	.7	13.9	3.9	1,084.2	44.2
Year	.7	5,714.9	565.9	857.4	11.0	4,303.3	.7	52.7	16.0	4,233.9	212.3
1987 4/											
I	.7	1,441.7	147.5				1.0				

1/ Totals may not add because of rounding. 2/ Hatching use for 1986 calculated by the new method. 3/ Calculated from unrounded data. 4/ Preliminary.

Table 8--Total eggs: Supply and utilization by quarters, 1985-87

Year	Supply				Utilization					
	Production	Imports 1/	Beginning stocks	Total supply	Ending stocks 1/	Exports and shipments 1/	Eggs used for hatching	Military 1/	Domestic disappearance Civilian	
									Total	Per capita 2/
	- - Million dozen - -									Number
1985 4/										
I	1,430.5	2.2	11.1	1,443.8	11.0	24.5	136.1	5.1	1,267.2	64.4
II	1,407.5	3.3	11.0	1,421.8	12.2	24.5	139.7	5.6	1,239.7	62.8
III	1,407.7	2.3	12.2	1,422.2	13.1	25.0	133.7	4.5	1,245.9	63.0
IV	1,442.8	4.9	13.1	1,460.8	10.7	27.0	138.6	5.0	1,279.4	64.5
Year	5,688.4	12.7	11.1	5,712.2	10.7	101.0	548.1	20.2	5,032.2	254.7
1986 4/										
I	1,423.3	3.6	10.7	1,437.6	8.7	33.4	139.2	4.6	1,251.6	63.0
II	1,421.2	4.0	8.7	1,433.9	11.9	28.2	144.7	4.2	1,245.0	62.5
III	1,413.3	2.2	11.9	1,427.4	11.5	36.5	140.9	4.5	1,234.0	61.8
IV	1,457.2	3.9	11.5	1,472.6	10.4	31.5	141.1	4.2	1,285.4	64.2
Year	5,714.9	13.7	10.7	5,739.3	10.4	129.6	565.9	17.5	5,016.0	251.4
1987 3/										
I	1,441.7		10.4		11.9		147.5			

1/ Shell eggs and the approximate shell-egg equivalent of egg products. 2/ Calculated from unrounded data. 3/ Preliminary.

Prices for cartoned Grade A large eggs in New York during January-March averaged 65 cents per dozen, down from 74 cents in 1986.

Wholesale prices in New York did not increase before Easter as did the 12-city metro egg price. Egg supplies in New York were evidently large enough to fill the Easter demand without boosting prices. Prices are expected to decline seasonally in May and June, averaging in the upper 50's to low 60-cent range for the second quarter, down from 1986's 63 cents.

Even with an increase in breaker purchases and export demand, egg prices in the second half of 1987 may average in the mid to upper 60-cents-per-dozen range, down from 73 cents in 1986. Although consumption in 1987 will be near last year, the long term trend is toward lower egg consumption. Thus increased egg supplies will likely keep prices weak.

Cold Storage Stocks Higher

Cold storage stocks of eggs and egg products on April 1 were up 3 million dozen (shell equivalent) from last year and up nearly 1 million dozen from March 1, 1987. Shell eggs in cold storage were up 360,000 dozen from last year. The additional stocks probably were trimmed during April when more eggs are needed for shell sales and breakers are on reduced schedules. In the past 2 years, stocks have been built during the summer to supply increased needs for holiday baking in the fourth quarter.

Broilers

Boiler production is expected to be nearly 9 percent above year-earlier levels through the summer and fall. Prices will likely average in the upper 40-cents-a-pound range this summer before declining seasonally in the fall. Increased pork production in the second half of the year, combined with larger broiler and turkey production, will put downward price pressure on broilers in the second half of this year, but reduced beef supplies may help limit price declines.

First Quarter Output Up 9 Percent

Broiler producers have responded to favorable returns in recent years by increasing production. Federally inspected slaughter in 1986 was up 5 percent from the year before and will continue at record levels throughout 1987.

Output of broiler meat in federally inspected slaughter plants during January-March totaled 3,728 million pounds, ready-to-cook, 9 percent above 1986. The number of birds slaughtered was up 8 percent and the average weight per bird was up 1 percent.

Weekly reports on slaughter and monthly broiler chicks hatched indicate that second-quarter broiler meat output will be up 8 percent from 1986. In recent months, the

Table 9--Young chicken prices and price spreads, 1986-87

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
						Cents per pound							
Farm price 1/													
1986	30.6	29.2	29.7	29.5	32.2	35.4	42.7	43.9	36.5	39.3	34.9	30.6	34.5
1987	31.1	30.1	29.1	29.6									
Wholesale RTC 12-city av. 2/													
1986	51.7	49.0	50.3	50.0	54.6	58.3	69.1	69.7	61.0	61.6	57.5	50.0	56.9
1987	51.8	49.8	48.5	48.6									
U.S. av. retail price													
1986	76.6	77.1	76.7	75.2	76.9	79.5	88.9	95.8	91.0	90.0	87.8	86.5	83.5
1987	82.1	83.2	80.4										
Price spreads													
Retail-to-cons.													
1986	19.5	21.8	21.0	19.2	16.3	15.5	16.4	20.0	21.6	20.5	22.6	30.0	20.4
1987	24.3	26.8	25.2										
						1967 = 100							
Retail pr. index Wh. chickens													
1986	215.3	216.5	217.3	213.0	217.5	225.2	249.9	271.2	257.3	256.1	252.2	248.1	236.6
1987	245.0	243.5	236.2										

1/ Live weight. 2/ Beginning May 1983, 12-city composite weighted average.

Table 10—Broilers: Eggs set and chicks placed weekly in 12 commercial States, 1985-87 1/

Period 2/	Eggs set			Chicks placed		
Month and day 2/	1985/86	1986/87	Percent of previous year	1985/86	1986/87	Percent of previous year
	- - - Thousands - - -		Percent	- - - Thousands - - -		Percent
November						
15	107,572	111,920	104	74,717	78,065	104
22	107,422	112,435	105	82,146	82,639	101
29	106,877	111,341	104	81,550	86,872	107
December						
6	105,019	107,487	102	83,167	87,094	105
13	105,241	112,528	107	82,417	86,360	105
20	104,540	112,441	108	82,615	86,154	104
27	105,738	110,972	105	80,671	82,636	102
January						
3	105,736	112,239	106	80,302	87,426	109
10	104,929	112,724	107	80,928	86,370	107
17	104,770	112,986	108	81,859	85,671	105
24	105,404	112,882	107	81,538	86,904	107
31	108,075	112,933	104	80,854	86,482	107
February						
7	108,648	112,014	103	79,608	86,509	109
14	109,104	111,216	102	80,688	87,285	108
21	109,829	115,079	105	82,934	87,483	105
28	109,177	116,488	107	82,907	87,031	105
March						
7	109,856	116,092	106	83,467	86,840	104
14	109,260	115,863	106	84,160	88,959	106
21	108,250	114,802	106	85,298	90,621	106
28	110,140	117,294	106	85,881	90,026	105
April						
4	110,460	117,906	107	85,443	90,398	106
11	110,677	118,570	107	83,207	88,828	107
18	110,395	117,036	106	85,469	90,892	106
25	108,137	116,867	108	85,332	92,382	108
May						
2	111,255	115,800	104	85,533	92,171	108
9	110,057			85,285		
16	111,227			83,996		
23	111,069			86,487		
30	111,279			85,652		
June						
6	111,516			86,167		
13	110,795			85,385		
20	110,838			85,975		
27	105,571			85,939		
July						
4	110,117			85,830		
11	109,891			86,494		
18	110,171			81,253		
25	109,324			84,366		
August						
1	108,800			83,908		
8	106,725			82,990		
15	106,058			81,299		
22	108,128			80,056		
29	108,137			77,814		
September						
5	105,998			79,070		
12	105,154			80,804		
19	103,796			82,698		
26	106,794			80,765		
October						
3	109,679			80,844		
10	107,956			79,043		
17	100,314			81,120		
24	103,092			83,824		
31	108,830			81,482		
November						
7	112,545			76,349		

1/ 12 States: Ala., Ark., Calif., Del., Fla., Ga., Md., Miss., N.C., Pa., Tex., and Va. 2/ Weeks in 1986/87 and corresponding weeks in 1985/86.

Table 11--Broiler chicks hatched and pullet chicks placed in hatchery supply flocks, 1986-87

Month	Broiler-type chicks			Pullet chicks placed in broiler hatchery supply flocks					
				Monthly placements			Cumulative placements 7-14 months earlier		
	1985	1986	1987	1985	1986	1987	1985	1986	1987
	Thousands								
January	401,666	409,336	439,618	3,471	3,395	4,077	27,277	27,483	29,039
February	364,542	376,092	406,140	3,017	3,420	3,699	27,286	27,940	29,427
March	418,842	432,871	451,224	3,603	3,675	4,111	26,771	27,374	29,523
April	411,739	424,078		3,884	4,062		26,647	27,156	29,722
May	423,991	438,623		3,672	3,938		26,733	27,321	30,148
June	410,815	428,691		3,162	3,515		26,225	27,002	30,242
July	407,502	429,883		3,400	3,672		25,944	26,868	30,603
August	406,426	415,991		3,165	3,846		25,895	26,591	30,742
September	380,138	401,676		3,253	3,594		25,513	26,849	30,926
October	382,559	416,193		3,182	3,846		25,981	27,124	31,365
November	379,050	402,582		3,284	3,769		26,790	28,021	
December	414,886	437,287		3,750	4,423		27,384	28,706	

number of broiler chicks hatched in the 12 major producing States has been 1 percent below the increase for the entire United States. Thus the weekly data for the 12 major States probably underestimate the actual increase in production.

Hatchery operators are expecting sharply increased demand for hatching eggs in the second half of 1987. The number of replacement pullets added to the flocks will boost the number of layers (estimated by using the cumulative placements 7 to 14 months earlier) by 11 percent in the second quarter and 15 percent in the third quarter. Boosts of this magnitude (using past relationships for potential numbers of birds slaughtered) imply production will be up 10 percent from last year. An increase of this size would require additional facilities, possibly more than are currently available. With a question of available facilities, output is expected to be up 9 percent during second-half 1987.

Strong Consumer Demand Steadies Prices

Broiler prices continued to benefit from higher retail prices for beef and pork during the first quarter of 1987. Retail broiler prices were up from last year in spite of a sharp rise in production, implying some upward shift in the demand curve for broilers.

Consumption of young chicken during January-March was likely about 1 pound per person above the 13.7 pounds consumed in the first quarter of 1986. During the same period, retail prices for frying chicken reported by the Bureau of Labor Statistics averaged 82 cents per pound, up from 77 cents last year. They may show a seasonal gain into the summer, but not as large as the unusually high prices of last year.

January-March wholesale prices in the 12 cities for a composite of whole birds averaged 50 cents per pound, the same as in 1986. Prices usually increase seasonally in the spring and early summer when consumer demand increases as more chicken is used for outdoor barbecuing and picnics. Also, with chicken entrees on most fast food menus, more chicken will be consumed during the summer travel season when fast food sales normally increase. With a large prospective increase in supply, broiler prices are expected to average in the upper 40's to maybe the 50-cent range through the summer, down from 60 cents in 1986. Prices in October-December may slip to the mid 40-cents-per-pound range, down from 56 cents last year.

Exports Above 1986

Young chicken (primarily broilers) exports during January-February increased 24 percent

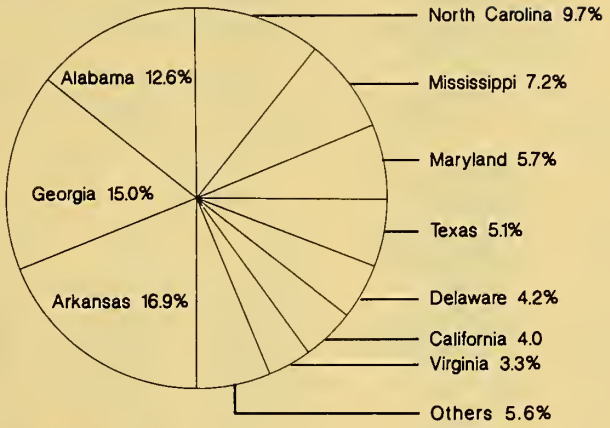
Table 12--Estimated costs and returns, 1986-87 1/

Year	Production costs		Wholesale		Net returns
	Feed	Total	Total costs 2/	Price 3/	
Market eggs (cts/doz)					
1986					
I	27.0	45.2	65.7	74.4	8.7
II	27.4	45.6	66.1	63.8	-2.3
III	25.3	43.5	64.0	71.3	7.3
IV	22.0	40.2	60.7	74.6	13.9
Year	25.4	43.6	64.1	71.1	7.0
1987					
I	21.9	40.1	60.6	68.1	7.5
Broilers (cts/lb)					
1986					
I	14.7	22.7	44.7	50.4	5.7
II	15.0	23.0	45.0	54.2	9.2
III	15.0	23.0	45.0	66.5	21.5
IV	12.9	20.9	42.3	56.3	14.0
Year	14.4	22.4	44.3	57.0	12.7
1987					
I	12.9	20.9	42.2	50.8	8.6
Turkeys (cts/lb)					
1986					
I	20.9	34.6	59.6	60.8	1.3
II	21.7	35.4	60.6	72.3	11.7
III	22.1	35.8	61.1	83.1	22.0
IV	19.7	33.4	58.1	77.9	19.8
Year	21.1	34.8	59.8	75.2	15.3
1987					
I	18.4	32.1	56.4	55.4	-.9

1/ Costs are weighted by monthly production. 2/ Based on farm cost converted to wholesale market value. 3/ Wholesale prices used are the 13-metro area egg price, 12-city weighted average broiler price, and a weighted average of 8-16 lb. young hens and 14-22 lb. toms in Central, Western, and Eastern Regions. 4/ Weighted average.

from a year ago to 92 million pounds. The principal reason was a sharp rise in exports to Egypt, because of sales under the Export Enhancement Program (EEP). Japan took an additional million pounds over its 1986 purchases, but sales to Hong Kong were down slightly. Most of the increase in exports under EEP were whole birds to Egypt. Exports of cut-up young chicken were down slightly in January-February, but still represented 72 percent of total chicken exports.

Arkansas, Georgia Were Leading Broiler Producers



Number of head, 1986

Table 13--Federally inspected young chicken slaughter, 1986-87

Year	Number	Average weight	Live-weight pounds	Certified RTC
	Million	Pounds	Million	Pounds
1986				
I	1,099	4.30	4,722	3,414
II	1,189	4.24	5,045	3,673
III	1,196	4.17	4,988	3,620
IV	1,159	4.25	4,921	3,558
Year	4,643	4.24	19,676	14,266
1987				
I	1,186	4.33	5,140	3,728

Producers Raised
4.6 Billion Broilers in 1986

Producers continued to raise record numbers of broilers in 1986. They produced 4,646 million during the 1986 marketing year (December 1-November 30), 4 percent more than in 1985. The top 10 producing States increased output only 3 percent from 1985 and their share of total birds raised slipped 1 percentage point to 84 percent.

Arkansas was the largest producer with 787 million birds, 17 percent of the total and the same as last year. The ranking of the top 10 states in 1986 was unchanged from 1985.

Table 14--Commercial broilers and turkeys: Number produced or raised by States and regions, by years, 1984-86 1/

State and region	Commercial broilers produced 1/ 2/			Turkeys raised, all breeds 7/ 3/		
	1984	1985	1986	1984	1985	1986
				Thousands		
Maine	4/	4/	4/			
New Hampshire				26	28	26
Vermont						
Massachusetts				152	156	145
Rhode Island						
Connecticut				31	35	40
New York	670	1,750	2,000	329	314	343
New Jersey				88	88	100
Pennsylvania 5/	89,435	94,696	101,907	6,100	7,100	7,800
North Atlantic	90,105	96,446	103,907	6,727	7,721	8,454
Ohio	9,000	9,000	9,900	2,800	2,800	3,100
Indiana	4/	4/	4/	6,310	6,941	9,370
Illinois				213	280	347
Michigan	1,130	1,300	600	2,100	2,300	2,700
Wisconsin	11,500	11,200	11,600	6,120	6,150	6,128
East North Cen	21,630	21,500	22,100	17,620	18,471	21,645
Minnesota	25,600	26,900	29,700	28,500	30,400	34,200
Iowa	2,100	2,000	2,700	5,800	6,300	7,000
Missouri				12,000	12,500	13,500
North Dakota				890	900	1,030
South Dakota				1,522	1,723	1,968
Nebraska	1,050	885	832	850	918	1,437
Kansas				275	200	104
West North Central	28,750	29,785	33,232	49,431	52,941	59,239
Delaware	189,615	196,399	196,783	11	11	8/125
Maryland	271,168	272,429	263,885	129	129	
Virginia	147,829	154,096	154,156	10,795	13,066	14,307
West Virginia	26,020	25,689	29,010	2,300	2,400	2,220
North Carolina	428,260	447,300	450,500	30,400	31,850	39,100
South Carolina	57,175	60,367	63,801	2,194	2,850	3,900
Georgia	636,785	677,224	697,364	2,582	2,631	2,426
Florida	96,150	104,207	111,884			
South Atlantic	1,853,002	1,937,711	1,967,383	48,435	52,937	62,078
Kentucky	2,994	3,176	3,012			
Tennessee	4/	4/	4/			
Alabama	536,580	561,757	587,563			
Mississippi	312,170	328,732	335,704			
Arkansas	724,964	759,963	786,779	14,366	16,000	16,500
Louisiana	4/	4/	4/			
Oklahoma	60,530	61,730	79,500	4/	4/	4/
Texas	200,500	215,900	238,600	4/	4/	4/
South Central	1,837,738	1,931,258	2,031,158	14,366	16,000	16,500
Montana						
Idaho						
Wyoming						
Colorado				4/	4/	4/
New Mexico						
Arizona						
Utah				2,387	3,082	3,390
Nevada						
Washington	21,700	23,000	25,100			
Oregon	13,400	14,400	15,800	900	1,300	
California	175,469	174,338	184,832	19,730	20,500	21,900
West	210,569	211,738	225,732	23,017	24,882	25,290
Alaska						
Hawaii	2,647	2,359	2,288			
Other States 4/	237,950	247,952	260,512	11,700	12,400	12,500
48 States	4,279,744	4,476,390	4,644,024	171,296	185,352	207,216
United States 6/	4,282,391	4,478,749	4,646,312	171,296	185,352	207,216

1/ Includes production of other meat-type breeds. 2/ December 1 through November 30 marketing year. 3/ Calendar year. 4/ Combined to avoid disclosing individual operations. 5/ Included are broilers destroyed due to the outbreak of avian influenza in 1983. 6/ Excludes States producing less than 500,000 birds and includes broilers destroyed due the outbreak of avian influenza in 1983. 7/ Does not include young turkeys lost; based on turkeys hatched September 1 of previous year through August 31, of the current year. 8/ Maryland and Delaware combined.

Turkeys

Turkey meat output will increase seasonally in coming months, but the year-to-year gain likely will narrow slightly as we move into the heavier production months. Larger turkey, broiler, and pork supplies will probably cause second-half turkey prices to drop below levels of July-December 1986.

Record Turkey Production

Turkey producers responded to very favorable returns last year by increasing poult production. As a result, January-March turkey meat output in federally inspected plants was up 20 percent to a record 668 million pounds. Almost all of the gain was from increased birds marketed as the average weight of birds marketed (20.66 pounds) was up only 1 percent from last year.

Turkey output will continue well above year-earlier levels during the rest of the year. Poults placed that could be slaughtered in the second quarter were 22 percent above last year. Placements have continued very strong for the beginning of the major hatching season. March placements were up 21 percent and eggs in incubators were up 15 percent on April 1.

Turkey meat output during April-June is expected to be up 19 percent from 1986. Output will increase seasonally during the second half of the year but the year-over-year increase is expected to narrow to around 15 to 16 percent because of limited facilities for production and processing capacity during the heavy production season. Because more further processed items are geared to year-round consumption, 41 percent of 1986 production was in the first half of the year. Twenty years ago, 14 percent of the turkey was produced in the first half.

Table 15--Federally inspected turkey slaughter, 1986-87

Year	Number	Average weight	Live-weight pounds	Certified RTC
	Million	Pounds	Million	Pounds
1986				
I	34.2	20.41	697.5	556.1
II	45.4	19.81	898.7	717.4
III	60.5	19.66	1,189.5	938.4
IV	56.8	20.44	1,161.4	921.1
Year	196.9	20.08	3,947.0	3,133.0
1987				
I	40.9	20.67	844.4	668.3

Table 16--Turkey hatchery operations, 1985-87 1/

Month	Total turkey placed 2/		Eggs in incubators first of month, changes from previous year	
	1985-86	1986-87	1985-86	1986-87
	- - Thousands - -		- - - Percent - - -	
Sept.	10,661	13,620	20	18
Oct.	12,451	14,135	8	17
Nov.	12,648	13,836	13	11
Dec.	14,448	17,705	17	18
Jan.	17,204	21,118	8	26
Feb.	18,608	22,630	13	14
Mar.	20,761	25,172	8	18
Apr.	23,065	26,093	10	15
May	24,337		9	14
June	23,394		10	
July	22,310		13	
Aug.	16,405		8	

1/ Breakdown by breed not shown to avoid disclosing individual operations. 2/ Excludes exported poults.

Turkey Prices To Strengthen Seasonally in Second Half

Wholesale turkey prices declined seasonally in first-quarter 1987, forced lower by increased production and larger carryover from 1986. During January-March, prices for commodity pack hen turkeys in the Eastern region averaged 58 cents per pound, down from 62 cents in 1986. Prices strengthened during the quarter as retailers began contracting for Easter supplies. Prices have slipped since the Easter weekend. During first-quarter 1987, retail turkey prices reported by the Bureau of Labor Statistics averaged 103.3 cents per pound, down from 1986's 106.3 cents and 107.7 cents in fourth-quarter 1986.

Wholesale prices for hen turkeys are expected to strengthen seasonally as stocks begin rebuilding late in the second quarter. During the second quarter, prices may average in the upper 50-cents-per-pound range, down from 68 cents last year. Prices in second-half

Table 17--Turkey prices and price spreads, 1986-76

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
						Cents per pound							
Farm price 1/													
1986	35.6	36.3	36.9	38.1	40.9	45.9	49.3	50.9	51.4	53.0	51.5	43.0	44.4
1987	34.9	35.3	37.6	36.5									
New York, hens 8-16 lbs 2/													
1986	60.2	61.7	63.9	64.6	67.1	73.8	77.8	80.5	81.2	83.2	80.7	71.1	72.2
1987	55.2	58.5	60.3	58.3									
4-region average retail price													
1986	106.3	107.8	104.8	104.2	103.4	102.3	105.6	109.5	111.9	112.9	108.1	102.1	106.6
1987	103.6	103.2	103.0										
Price spreads Retail-to-consumer													
1986	33.7	36.7	32.5	31.3	27.1	19.0	19.3	19.5	21.7	20.2	16.2	21.8	24.9
1987	39.8	37.4	35.4										
						December 1977=100							
Consumer pr. index													
1986	142.1	143.2	141.4	139.6	140.7	139.8	141.1	142.2	145.8	149.1	145.0	143.0	142.8
1987	144.2	142.0	142.5										

1/ Live weight. 2/ Wholesale, ready-to-cook.

1987 may average in the mid to upper 70-cent range, down from 79 cents last year. Plentiful supplies of broilers and pork in 1987 will tend to keep their prices lower and also provide more competition for turkey.

Turkey Stocks Above 1986

Cold storage turkey stocks have increased during the first quarter. With Easter late this year, it is assumed that part of the stock building was for the Easter market in April. With more people having turkey at Easter, stock building appears to have changed.

On April 1, turkey stocks in cold storage, both whole and parts, totaled 229 million pounds, up from 151 million last year. Excellent sales of turkey during Easter probably reduced stocks to normal working levels. This year, the supply of hams was low relative to many years, which may have caused a shift to turkey. Thus, turkey prices are not expected to be weakened by large stocks.

Export Increase

Exports of whole turkey and parts during January and February were up 12 percent from last year to 3.8 million pounds. Increased exports to Canada accounted for all of the increase and these were primarily whole turkeys. Exports to the Federal Republic of Germany and Egypt were down from 1986 levels.

Higher 1986 Value of Production

The value of production from eggs, other chickens, broilers, and turkeys during the 1986 marketing year (December 1-November 30) totaled $12.4 billion, up 13 percent from 1985. Sales of other chickens were down from 1985 but the other categories were up. Arkansas was the top producing State with poultry and egg output valued at $1.5 billion. Georgia with $1.3 billion was number 2, followed by North Carolina.

Total value of production from broilers increased 19 percent to nearly $7 billion and accounted for nearly 55 percent of the combined total for poultry and eggs. The increase from 1985 resulted from a 4-percent rise in production and a 15-percent increase in the liveweight equivalent price.

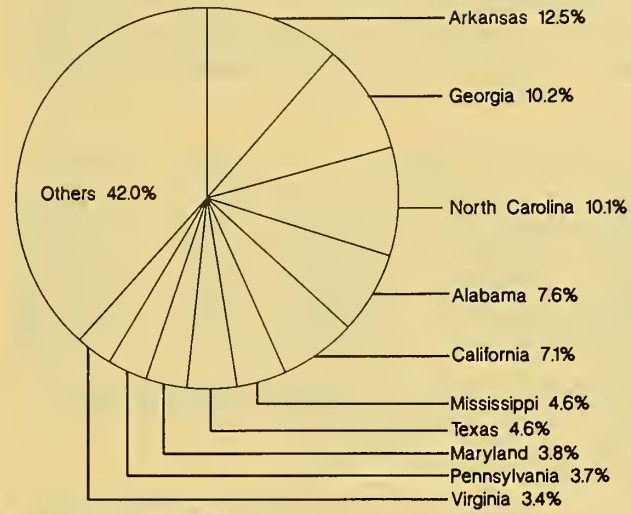
The value of turkey production rose 7 percent from 1985 as larger production offset

Table 18--Eggs and poultry: Value of production, 1980-86 1/

Year	Value of production			Value of sales	Total
	Eggs	Broilers	Turkeys	Nonbroiler	
	1,000 dollars				
1980	3,268	4,303	1,272	128	8,971
1981	3,671	4,699	1,248	132	9,750
1982	3,459	4,502	1,255	119	9,335
1983	3,469	4,873	1,269	147	9,758
1984	4,111	6,018	1,655	170	11,954
1985	3,253	5,680	1,819	152	10,904
1986 2/	3,515	6,780	1,952	128	12,375

1/ Data (except turkey) reported on December-November marketing year.
2/ Preliminary.
Sources: Nat'l Agr. Stat. Serv. and Econ. Res. Serv., USDA.

Top Poultry-Producing States



By value of production, 1986

Table 19--Eggs: Production and value, 1980-86 1/

Year	Average layers on hand during the year	Eggs			
		Produced		Price per dozen	Value of production
		Per layer on hand during year	Total		
	Thousands	Number	Millions	Cents	1,000 dollars
1980	287,705	242	69,686	56.3	3,267,563
1981	287,774	243	69,825	63.1	3,671,143
1982	286,369	244	69,718	59.5	3,458,873
1983	276,263	247	68,169	61.1	3,469,368
1984	278,022	245	68,230	72.3	4,110,920
1985	276,680	247	68,407	57.1	3,252,519
1986 2/	276,870	247	68,514	61.6	3,515,228

1/ Data cover both farm and commercial flocks Data reported on December-November marketing year.
2/ Preliminary.
Source: "Poultry, Production, and Value." Nat'l Agr. Stat. Serv., USDA.

lower prices. Production increased 12 percent, but prices averaged 4 percent lower.

With higher prices in 1986, the value of egg production increased 8 percent from 1985 and accounted for 28 percent of the total gross income from poultry and eggs. Egg production was nearly the same but prices averaged 8 percent above 1985.

Fewer Chicken and Turkey Hatcheries

The number of chicken and turkey hatcheries continued to decline during 1985 and 1986. At the same time, egg capacities increased for both chicken and turkey hatcheries.

Table 20--Nonbroiler chickens: Production and value of sales, 1980-86 1/

Year	Sales		Price per pound	Value of sales
	Number	Pounds		
	1,000 head	Thousands	Cents	1,000 dollars
1980	238,495	1,167,017	11.0	128,268
1981	238,576	1,187,255	11.1	132,271
1982	242,027	1,158,703	10.3	118,915
1983	236,710	1,158,551	12.7	147,454
1984	224,664	1,067,729	15.9	169,732
1985	220,395	1,029,146	14.8	152,175
1986 2/	216,938	1,022,566	12.5	127,853

1/ Data reported on December-November marketing year. 2/ Preliminary.
Source: "Poultry, Production, and Value." Nat'l Agr. Stat. Serv., USDA.

Table 21--Broilers: Production and value, 1980-86 1/

Year	Produced		Price per pound	Value of sales
	Number	Pounds		
	- - Thousands - -		Cents	1,000 dollars
1980	3,963,211	15,538,573	27.7	4,302,818
1981	4,147,521	16,519,568	28.4	4,699,379
1982	4,148,970	16,759,860	26.9	4,502,214
1983	4,183,660	17,037,998	28.6	4,872,707
1984	4,282,391	17,862,944	33.7	6,017,504
1985	4,478,749	18,850,790	30.1	5,680,188
1986 2/	4,646,312	19,651,075	34.5	6,780,124

1/ Data reported on December-November marketing year. 2/ Preliminary.
Source: "Poultry, Production, and Value." Nat'l Agr. Stat. Serv., USDA.

Table 22--Turkeys: Production and value, 1980-86

Year	Number raised	Pounds produced	Price per pound	Value of sales
	- - Thousands - -		Cents	1,000 dollars
1980	165,243	3,076,858	41.3	1,271,637
1981	170,875	3,264,463	38.2	1,247,803
1982	165,464	3,175,060	39.5	1,254,700
1983	170,723	3,335,519	38.0	1,269,051
1984	171,296	3,385,721	48.9	1,655,256
1985	185,352	3,702,194	49.1	1,818,626
1986 1/	207,216	4,141,727	47.1	1,951,570

1/ Preliminary.
Source: "Poultry, Production, and Value." Nat'l Agr. Stat. Serv., USDA.

Table 23--Hatcheries: Number, capacity and utilization, available data, 1975-87

Year	Chicken hatcheries 1/			Chicks hatched in year ending June 30		Turkey hatcheries			Poults hatched in year ending June 30 3/	
	Number	Egg capacity on January 1		Total	Per unit of hatchery capacity	Number 2/	Egg capacity on January 1		Total	Per unit of hatchery capacity
		Total	Per hatchery				Total	Per hatchery		
		Thousands	Thousands	Thousands	Number		Thousands	Thousands	Thousands	Number
1975	797	416,040	522.0	3,477,250	8.36	180	41,851	232.5	129,968	3.11
1977	651	420,070	645.3	4,072,157	9.69	149	40,375	271.0	147,098	3.64
1979	698	469,032	759.0	4,577,549	9.76	126	36,711	291.4	167,955	4.58
1981	538	466,096	866.3	4,821,891	10.34	109	39,022	358.0	189,299	4.85
1983	482	477,996	991.6	4,880,118	10.21	94	36,756	391.0	185,097	5.04
1985	439	481,529	1,096.9	5,102,551	10.60	88	36,649	416.5	188,965	5.16
1987	393	486,682	1,238.4	4/5,524,496	11.35	81	41,495	512.3	4/237,727	5.73

1/ Includes Hawaii beginning in 1961. 2/ Excludes Alaska and Hawaii. 3/ Beginning in 1983, poults placed in year ending June 30. 4/ Year ending March 31.

On January 1, 1987, there were 393 chicken hatcheries with a capacity of 487 million eggs, compared with 439 units and 482 million eggs 2 years earlier. Fifty-eight percent of the hatcheries had egg capacities of 500,000 or more, up from 55 percent on January 1, 1985, and accounted for 95 percent of production in January 1, 1985.

The number of turkey hatcheries declined, but capacity increased during 1985 and 1986. The number of hatcheries on January 1, 1987, totaled 81, with a total capacity of about 41 million eggs. This compares with 88 hatcheries 2 years ago with an egg capacity of nearly 37 million. Hatcheries of 500,000 or more accounted for nearly 40 percent of all turkey hatcheries on January 1, 1987, up from 33 percent in 1985. The large hatcheries represented nearly 80 percent of the capacity on January 1, 1987, 9 percentage points above 1985. The largest number of hatcheries was located in the western North Central region, followed by the West and South Atlantic regions. In terms of capacity, the western North Central region was largest followed by the South Atlantic and the West.

HOGS

The March *Hogs and Pigs* report showed that producers are expanding their breeding inventories. Also, producers plan to moderately increase the number of sows farrowing over the next 6 months. The report also showed that producers are increasing productivity with a higher percentage of the breeding herd farrowing and the number of pigs per litter increasing. Based on the March 1 market hog inventory and farrowing intentions, pork production is expected to rise about 3 percent in 1987 over 1986, with all of the increase coming in the second half.

For all of 1986, the average return above cash and replacement costs was $8.30 per cwt for a farrow-to-finish producer in the North Central States marketing 1,600 hogs per year. This was the highest return since 1982. Early projections indicate that returns in 1987 may be a little higher than in 1986. Lower production costs will offset the expected lower hog prices. (In this issue, a special article describes the farrow-to-finish hog production budget that will become a regular feature of the Livestock and Poultry Situation).

Hog prices rose from the mid-$40's per cwt in early March to the mid-$50's in late April as live weights dropped and the seasonal increase in slaughter rates failed to develop. March and April slaughter rates were below expectations based on the March 1 heavier weight market hog inventory. Hog prices may drop contraseasonally if slaughter rates in May rise significantly as expected.

Pork Production Expected To Increase

All hogs and pigs on March 1 totaled 39.2 million head in the 10 quarterly reporting States, up 3 percent from a year ago, but 1

Table 24--Hogs on farms March 1, farrowings and pig crops, 10 States 1/

Item	1984	1985	1986	1987	1987/86
		1,000 head			% change
Inventory	40,070	39,680	38,210	39,235	+3
Breeding	5,446	5,220	4,948	5,230	+6
Market	34,624	34,460	33,262	34,005	+2
Under 60 lb	12,437	12,701	12,350	12,931	+5
60-119 lb	8,561	8,427	8,046	8,144	+1
120-179 lb	7,769	7,580	7,276	7,320	0
180 + lb	5,857	5,752	5,590	5,628	+1
Sows farrowing					
December 2/-February	1,964	1,955	1,863	1,957	+5
March-May	2,481	2,420	2,161	3/2,305	+7
December 2/-May	4,445	4,375	4,024	4/4,262	+6
June-August	2,259	2,191	2,034	3/2,200	+8
September-November	2,316	2,265	2,150		
June-November	4,575	4,456	4,184		
Pig crops					
December 2/-February	14,288	14,690	14,254	15,156	+6
March-May	18,814	18,762	16,878		
December 2/-May	33,102	33,452	31,132		
June-August	17,158	16,941	15,853		
September-November	17,420	17,225	16,729		
June-November	34,578	34,196	32,582		
			Number		
Pigs per litter					
December 2/-February	7.27	7.51	7.65	7.74	+1
March-May	7.58	7.75	7.81		
December 2/-May	7.45	7.65	7.74		
June-August	7.60	7.73	7.79		
September-November	7.52	7.62	7.78		
June-November	7.56	7.67	7.79		

1/ Georgia, Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Carolina, and Ohio. 2/ December preceding year. 3/ Intentions. 4/ Intentions for March-May.

Table 25--Sow slaughter balance sheet, 10 States

Item	1984	1985	1986	1987
	Million head			
December 1 breeding 1/	5.6	5.3	5.3	5.2
December-February				
Comm. sow slaughter 2/	.8	.8	.8	.7
Gilts added	.6	.7	.4	.7
March 1 breeding	5.4	5.2	4.9	5.2
March-May				
Comm. sow slaughter 2/	.7	.7	.6	
Gilts added	1.1	.9	.5	
June 1 breeding	5.8	5.4	4.8	
June-August				
Comm. sow slaughter 2/	.9	.8	.7	
Gilts added	.7	.8	.7	
September 1 breeding	5.6	5.4	4.8	
September-November				
Comm. sow slaughter	.9	.8	.7	
Gilts added	.6	.7	1.1	

1/ December previous year. 2/ 75 percent of estimated U.S. commercial sow slaughter.

percent below March 1, 1985. Hogs and pigs kept for breeding totaled 5.23 million head, up 6 percent from last year and about the same as on the comparable date in 1985. The market hog inventory totaled 34 million head, 2 percent above last year, but 1 percent below 2 years ago. Among the 10 States, Iowa had the largest percentage increase in the breeding hog inventory, up 10 percent. Also, Iowa had a third of the 10-State breeding inventory. Only Indiana and Kansas registered declines, 2 and 7 percent, respectively.

As of September 1, 1986, producers indicated intentions to have 6 percent fewer sows farrow during December 1986-February 1987, but as of December 1 they indicated plans to have about the same number farrow as a year earlier. During December 1986-February 1987, the number of sows farrowing rose 5 percent above a year ago.

The litter rate was 7.74 pigs, a record high for December-February and the third consecutive record set. The record litter rate was due to continued improvements in management and genetics, as well as above-average temperatures in the North Central States, where about four-fifths of the hogs are produced. Because of the record litter rate, the December 1986-February 1987 pig crop was 6 percent above a year earlier and about the same as 2 years ago.

As of March 1, hog producers in the 10 quarterly reporting States said they intended to have 7 percent more sows farrow during March-May than a year ago. As of December 1, producers intended to have 2 percent more sows farrow during this period. Farrowing intentions for June-August are 8 percent above a year ago and slightly above 2 years ago. Because of the increased number of gilts in the breeding inventory the litter rate increase may slow or plateau temporarily.

So, the pig crop in March-May may be up about 8 percent from a year ago. The increase in actual and intended farrowings is due to profitability in hog production since mid-1986. However, some producers are faced with debts from recent years when returns did not cover all costs. These producers are probably paying down those debts and making repairs and replacing equipment, which may have been deferred from the years of relatively poor returns. The June-August farrowing intentions imply that the breeding inventory will be about the same size in June as in March. So, gilt retention only need match sow slaughter during March-May.

Hog slaughter in the second quarter is drawn largely from the inventory of market hogs weighing 60-179 pounds on March 1, which was up 1 percent from a year earlier. Commercial slaughter is projected to be down 2 to 4 percent. Federally inspected slaughter during April was down about 11 percent from a year earlier. The number of weekdays and Saturdays was the same as last year. However, Good Friday and Easter Monday, days when slaughter declines sharply from other weekdays, occurred in April this year. Last year they were in March. Even if the slaughter rate rises in May from April, the increase probably will not offset the April decline. The slaughter rate in June is expected to decline seasonally. In April, weights of barrows and gilts at the 7 markets averaged about a pound heavier than a year earlier. So, with a small proportion of sows in the slaughter mix, the average dressed weight is expected to be about the same as last year. Thus, second-quarter production is estimated at 3,475 million pounds, down 3 percent from a year ago.

Hog slaughter in the third quarter will be drawn from market hogs weighing under 60

pounds on March 1. This weight group was 5 percent larger than last year. Last year, commercial slaughter was less than indicated from historical relationships to market hog inventories and the December–February pig crops. This year, slaughter is expected to more closely follow historical relationships. So, commercial hog slaughter is expected to be 8 to 10 percent above last year. Commercial pork production is projected at 3,525 million pounds, up 9 percent from 1986.

The March–May pig crop is the principal source of fourth–quarter slaughter. If producers follow their March intentions and pigs per litter rise slightly, the pig crop would be up 7 percent from 1986. If producer returns decline from present levels to near breakeven this fall and the outlook is for returns to fall below total costs in 1988, there would be no incentive to retain gilts. Thus, commercial slaughter is expected to account for a higher percentage of the pig crop than a year ago. So, commercial slaughter is expected to be up 7 to 9 percent. The average dressed weight is expected to be about the same as last year because feed costs are expected to remain relatively low. Commercial production is forecast to total 3,875 million pounds, up 8 percent from a year ago.

Prices To Decline Sharply from a Year Ago

Hog prices at the 7 major markets increased $7 per cwt from mid–March to early May. The increase was due in part to the year–over–year decline in the slaughter rate and concerns about a tightness of frozen stocks for the summer, when production is at a seasonal low.

Hog prices may drop from the April level in May if slaughter rates increase as expected. However, they may rebound to the April level as slaughter drops seasonally in June. Lower beef production and relatively tight frozen pork stocks will help strengthen hog prices, but large increases in poultry production will temper price increases. So, on balance, prices are expected to average in the high $40's to low $50's in the second quarter.

Although pork production normally reaches a seasonal low in the summer, this summer an expected 9–percent year–over

Table 26--Federally inspected hog slaughter

Week ended	1985	1986	1987
		Thousands	
Jan. 1 1/	1,238	1,153	1,069
5	1,295	1,250	1,258
12	1,679	1,635	1,683
19	1,615	1,654	1,659
26	1,528	1,563	1,526
Feb. 2	1,565	1,506	1,500
9	1,582	1,526	1,455
16	1,508	1,512	1,502
23	1,539	1,501	1,395
Mar. 2	1,608	1,606	1,533
9	1,635	1,635	1,555
16	1,638	1,650	1,577
23	1,647	1,556	1,573
30	1,642	1,579	1,500
Apr. 6	1,569	1,518	1,529
13	1,623	1,633	1,553
20	1,676	1,651	1,498
27	1,662	1,619	
May. 4	1,702	1,637	
11	1,699	1,606	
18	1,705	1,560	
25	1,580	1,518	
June 1	1,361	1,307	
8	1,592	1,471	
15	1,561	1,459	
22	1,535	1,373	
29	1,476	1,329	
July 6	1,171	1,118	
13	1,523	1,390	
20	1,427	1,345	
27	1,400	1,280	
Aug. 3	1,474	1,312	
10	1,556	1,338	
17	1,524	1,367	
24	1,531	1,385	
31	1,601	1,419	
Sept. 7	1,429	1,257	
14	1,690	1,492	
21	1,667	1,504	
28	1,681	1,503	
Oct. 5	1,644	1,515	
12	1,686	1,546	
19	1,620	1,517	
26	1,654	1,538	
Nov. 2	1,668	1,565	
9	1,654	1,561	
16	1,654	1,519	
23	1,697	1,549	
30	1,328	1,308	
Dec. 7	1,656	1,530	
14	1,566	1,549	
21	1,655	1,491	
28	1,153	1,069	

1/ Corresponding dates-1985: December 29, 1984; 1986 December 28, 1985; December 27, 1986.

Table 27--Corn Belt hog feeding: Selected costs at current rates 1/

Purchased during: Marketed during:	Dec. Apr.	Jan. '86 May	Feb. June	Mar. July	Apr. Aug.	May Sept.	June Oct.	July Nov.	Aug. Dec.	Sept. Jan.	Oct. Feb.	Nov. Mar.	Dec. Apr.	Jan. May	Feb. June
EXPENSES: ($/head)															
40-lb feeder pig	28.65	30.96	37.26	41.33	37.98	39.97	41.92	50.76	65.44	59.63	53.23	50.00	47.69	47.00	53.96
Corn (11 bu)	24.53	25.08	25.08	25.08	25.08	26.18	25.63	21.67	17.82	15.29	14.52	15.84	16.28	15.40	15.18
Protein supplement (130 lb)	16.45	16.90	16.71	16.90	17.03	17.03	17.03	17.16	17.16	17.16	17.16	17.16	17.16	17.29	17.29
Total feed	40.98	41.98	41.79	41.98	42.11	43.21	42.66	38.83	34.98	32.45	31.68	33.00	33.44	32.69	32.47
Labor & management (1.3 hr) 2/	11.13	11.13	11.13	11.13	11.02	11.02	11.02	10.92	10.92	10.92	10.61	10.61	10.61	10.61	10.61
Vet medicine 3/	2.64	2.66	2.65	2.65	2.63	2.63	2.63	2.63	2.63	2.63	2.58	2.58	2.58	2.59	2.59
Interest on purchase (4 months)	1.22	1.31	1.58	1.75	1.57	1.65	1.73	2.00	2.22	2.35	2.00	1.88	1.80	1.74	2.00
Power, equip., fuel, shelter depreciation 3/	6.43	6.46	6.45	6.45	6.38	6.38	6.38	6.39	6.39	6.39	6.27	6.27	6.27	6.28	6.28
Death loss (4% of purchase)	1.15	1.24	1.49	1.65	1.52	1.60	1.68	2.03	2.26	2.39	2.13	2.00	1.91	1.88	2.16
Transportation (100 miles)	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48
Marketing expenses	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Miscell. & indirect costs 3/	.66	.66	.66	.66	.65	.65	.65	.65	.65	.65	.64	.64	.64	.64	.64
Total	94.47	98.01	104.62	109.23	105.48	108.74	110.30	115.83	118.11	119.02	110.77	108.61	106.56	105.05	112.33
SELLING PRICE REQUIRED TO COVER: ($/cwt)															
Feed and feeder costs (220 lb)	31.65	33.15	35.93	37.87	36.40	37.81	38.45	40.72	41.55	41.85	38.60	37.73	36.88	36.22	39.29
All costs (220 lb) $/cwt	42.94	44.55	47.55	49.65	47.95	49.43	50.13	52.65	53.69	54.10	50.35	49.37	48.44	47.75	51.06
Feed cost per 100-lb gain (180 lb)	22.75	23.32	23.21	23.32	23.39	24.01	23.70	21.57	19.43	18.03	17.60	18.33	18.58	18.16	18.04
Barrows and gilts 7 market $/cwt	40.27	46.91	54.50	60.99	63.39	59.01	54.21	53.62	51.42	47.39	48.73				
Net margin $/cwt	-2.67	2.36	6.95	11.34	15.44	9.58	4.08	.97	-2.27	-6.71	-1.62				
PRICES:															
40-lb feeder pig (So. Missouri) $/head	28.65	30.96	37.26	41.33	37.98	39.97	41.92	50.76	56.44	59.63	53.23	50.00	47.69	47.00	53.96
Corn $/bu 3/	2.23	2.28	2.28	2.28	2.28	2.38	2.33	1.97	1.62	1.39	1.32	1.44	1.48	1.40	1.38
Protein supp. (38-42%) $/cwt 4/	12.65	13.00	12.85	13.00	13.10	13.10	13.10	13.20	13.20	13.20	13.20	13.20	13.20	13.30	13.30
Labor & management $/hr 6/	8.56	8.56	8.56	8.56	8.48	8.48	8.48	8.40	8.40	8.40	8.16	8.16	8.16	8.16	8.16
Interest rate (annual)	12.79	12.70	12.70	12.70	12.40	12.40	12.40	11.80	11.80	11.80	11.30	11.30	11.30	11.10	11.10
Transportation rate $/cwt (100 miles) 7/	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22
Marketing expenses $/cwt 8/	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Index of prices paid by farmers (1910-14=100)	1116.00	1121.00	1119.00	1120.00	1108.00	1108.00	1108.00	1109.00	1109.00	1109.00	1089.00	1089.00	1089.00	1091.00	1091.00

1/ Although a majority of hog feeding operations in the Corn Belt are from farrow to finish, relative fattening expenses will be similar. Costs represent only what expenses would be if all selected items were paid for during the period indicated. The feed rations and expense items do not necessarily coincide with the experience of individual feeders. For individual use, adjust expenses and prices for management, production level, and locality of operation. Revisions have been made per annual Agricultural Prices. 2/ Adjusted monthly by the index of prices paid by farmers for commodities, services, interest, taxes, and wage rates. 3/ Average price received by farmers in Iowa and Illinois. 4/ Average prices paid by farmers in Iowa and Illinois. 5/ Assumes an owner-operator receiving twice the farm labor rate. 6/ Converted from cents/mile for a 44,000-pound haul. 7/ Yardage plus commission fees at a Midwest terminal market. *Preliminary.

Table 28--Commercial hog slaughter 1/ and production

Year	Barrows and gilts	Sows	Boars	Total 2/	Average dressed weight	Commercial production 2/
	- - - 1,000 head - - -				Pounds	Million pounds
1983:						
I	19,141	852	219	20,212	172	3,483
II	20,267	1,053	246	21,666	174	3,771
III	19,648	1,450	274	21,372	171	3,657
IV	22,808	1,291	235	24,334	173	4,206
Year	81,864	4,646	974	87,584	173	15,117
1984:						
I	20,548	1,024	234	21,806	171	3,738
II	19,885	989	249	21,123	174	3,670
III	18,072	1,184	240	19,496	172	3,355
IV	21,310	1,197	236	22,743	174	3,957
Year	79,815	4,394	959	85,168	173	14,720
1985:						
I	19,726	927	217	20,871	173	3,618
II	20,171	947	225	21,343	175	3,743
III	19,260	1,075	222	20,556	173	3,553
IV	20,445	1,065	211	21,721	176	3,814
Year	79,602	4,015	875	84,491	174	14,728
1986: 3/						
I	19,272	920	187	20,379	175	3,570
II	19,224	896	196	20,316	176	3,568
III	17,364	999	210	18,573	174	3,237
IV	19,224	926	180	20,330	178	3,623
Year	75,084	3,741	773	79,598	176	13,998
1987: 3/						
I	19,006	762	170	19,938	178	3,540

1/ Classes estimated. 2/ Totals may not add due to rounding. 3/ Preliminary.

year-increase in pork production would boost supplies above second-quarter levels. The large increase may keep hog prices in about the same range as in the second quarter.

Pork production may increase both seasonally and on a year-over-year basis in the fourth quarter. So, hog prices are expected to average in the low to mid-$40's. Beef production will be down, but its positive effect on price may be more than negated by increased poultry production.

Foreign Trade Developments

During January-February, pork imports totaled 188 million pounds (carcass weight), up 1 percent from a year ago. The largest exporters to United States are Canada and Denmark. Canada's share of the imported pork product market was 49 percent, compared with 42 percent a year ago. Denmark's share declined from 36 percent to 29 percent. Although both the Canadian dollar and the Danish krone have strengthened against the U.S. dollar, the krone has strengthened the most. Thus, Canada would be expected to increase exports at the expense of Denmark, given its locational advantage. For all of 1987, pork imports are expected to total about 1,100 million pounds, down 2 percent from 1986. Higher production and lower prices in the United States will largely account for the decline.

Live hogs imported from Canada during January-February totaled 69,303 head, down 41 percent from a year ago. For all of 1987, live hogs imported from Canada are expected to total 300,000 to 400,000 head, compared with 503,728 in 1986. The hogs are subject to a countervailing duty of $4.386Can per cwt.

Pork exports totaled 12 million pounds (carcass weight) during January-February compared to 10 million pounds a year earlier.

For the year, pork exports are expected to total about 100 million pounds, up 16 percent from 1986. Most of the increase will be due to the Food Security Act of 1985.

Cash Receipts Up 7 Percent

Cash receipts from marketings of hogs and pigs totaled $9.7 billion in 1986, up 7 percent from 1985. Marketings on a live-weight basis in 1986 were 4 percent below 1985, while prices rose 12 percent. Iowa, Illinois, Indiana, and Minnesota accounted for over one-half of total receipts.

Retail Prices Up Sharply

The retail composite pork price averaged $1.85 a pound in the first quarter, up 10 percent from a year ago. The farm-to-retail spread averaged $1.08 a pound, also up 10 percent. Retail pork prices are expected to average near $1.80 a pound for all of 1987, up 1 to 2 percent over 1986. The farm-to-retail spread may increase 6 to 8 percent over 1986's 96 cents per pound.

CATTLE

Record Slaughter Weights-- Current Feedlots

First-quarter beef production was unchanged from a year ago as record heavy slaughter weights more than offset a 1-percent decline in cattle slaughter. As cattle numbers stabilize, the slaughter mix and thus average slaughter weights over all classes of cattle also shift. In the first quarter, a 2-percent increase in steer and heifer slaughter almost offset a 12-percent drop in cow slaughter. Beef cow slaughter was down 18 percent, while dairy cow slaughter

Table 29--Commercial cattle slaughter 1/ and production

Year	Steers and heifers			Cows	Bulls and stags	Total 2/	Average dressed weight	Commercial production 2/
	Fed	Nonfed	Total					
	- - - 1,000 head - - -						Pounds	Million pounds
1983:								
I	6,419	424	6,843	1,701	188	8,732	633	5,527
II	6,367	581	6,948	1,694	209	8,851	628	5,556
III	6,799	621	7,420	1,908	220	9,548	630	6,015
IV	6,167	866	7,033	2,294	191	9,518	626	5,962
Year	25,752	2,492	28,244	7,597	808	36,649	629	23,060
1984:								
I	6,467	457	6,924	2,080	165	9,169	623	5,710
II	6,476	660	7,136	1,998	209	9,343	623	5,820
III	6,556	620	7,176	2,169	217	9,562	622	5,952
IV	6,259	677	6,936	2,372	198	9,508	624	5,936
Year	25,758	2,431	28,172	8,621	789	37,582	623	23,418
1985:								
I	6,678	208	6,886	1,879	171	8,936	637	5,692
II	6,663	534	7,197	1,630	195	9,022	656	5,923
III	6,887	577	7,464	1,691	197	9,352	659	6,167
IV	5,927	655	6,592	2,191	196	8,979	643	5,775
Year	26,155	1,984	28,139	7,391	759	36,289	649	23,557
1986: 3/								
I	6,464	371	6,835	1,884	165	8,884	649	5,769
II	6,644	743	7,387	2,006	181	9,574	652	6,247
III	6,745	776	7,521	1,941	191	9,653	650	6,275
IV	6,104	770	6,874	2,128	177	9,179	645	5,925
Year	25,957	2,660	28,617	7,959	714	37,290	649	24,216
1987: 3/								
I	6,533	417	6,950	1,651	164	8,765	657	5,755

1/ Classes estimated. 2/ May not add due to rounding. 3/ Preliminary.

Table 30--Commercial calf slaughter and production

Year	Slaughter 1/	Average dressed weight	Production 1/
	1,000 head	Pounds	Million pounds
1983:			
I	734	140	103
II	669	146	98
III	805	137	110
IV	868	135	117
Year	3,076	139	428
1984:			
I	817	141	115
II	745	152	113
III	861	143	123
IV	874	146	128
Year	3,297	145	479
1985:			
I	820	145	119
II	770	156	120
III	872	144	126
IV	923	145	134
Year	3,385	147	499
1986: 2/			
I	873	148	129
II	836	154	129
III	859	150	129
IV	840	145	122
Year	3,408	149	509
1987:			
I	768	148	114

1/ May not add due to rounding. 2/ Preliminary.

declined 4 percent. Even sharper year-to-year reductions in cow slaughter, particularly dairy, will occur during the second and third quarters as measured against the large Dairy Termination Program (DTP) cow slaughter during these periods in 1986. Fed cattle marketings are expected to remain near the large levels of recent years. As the steer and heifer proportion of the slaughter mix rises relative to a year ago, so will average slaughter weights. During the 1980's, steer and heifer dressed weights have averaged about 200 and 110 pounds heavier than dressed cow weights, respectively.

Rising fed steer and heifer proportions in the slaughter mix result in heavier average slaughter weights. However, these gains will be held down by competition for the reduced beef supply and current feedlot marketings. Average live weights for fed steers and heifers slaughtered in the High Plains in March were 38 pounds below a year earlier, while weights in early April were the lowest since late 1984. Blizzard conditions in Kansas, Nebraska, and western Iowa in late March resulted in increased deathloss and weight losses for cattle on feed in these areas. Thus very current feedlot marketings, plus poor weather conditions, will result in a very current situation through late spring.

Feedlot Inventories Down 2 Percent

Feedlot marketings in the 13 quarterly reporting States remain very current. Although the number of cattle on feed at the beginning of the quarter was 5 percent below a year ago, marketings during the quarter were about unchanged from a year ago. On January 1 feeders indicated intentions to market 3 percent fewer cattle than a year ago. Thus as indicated by the large proportion of the supply marketed and lighter marketing weights, cattle feeders remain willing to market cattle in a timely fashion. Net feedlot placements were up 8 percent during the quarter, the largest winter placements since 1973. Largest year-to-year increases in the 7 monthly reporting States occurred in February when placements rose 17 percent from the low year-earlier level. Placements increased 6 percent in March partially due to blizzards and cattle coming off wheat pastures early in the Central and Northern Plains States.

Cattle on feed on April 1 were 2 percent below a year ago, with sharp drops in the number of cattle on feed in the heavier weight groups. Steers weighing over 900 pounds and heifers over 700 pounds were down 13 percent and 11 percent, respectively. Thus, feedlots are likely to remain current, and competition for the tighter supply is likely to hold fed cattle prices in the mid-to-upper $60's this spring.

Yearling Supplies Continue To Drop

Increased feedlot marketings at positive returns have resulted in large placements and another sharp drop in feeder cattle supplies. Total feeder cattle supplies outside feedlots on April 1 and available for grazing operations or feedlot placement, declined 8 percent from a year ago. Sharpest year-to-year declines occurred for yearlings, which were down 19 percent. A slowdown in the rate of decline in

Table 31--Federally inspected cattle slaughter

Week ended	Cattle			Steers			Cows								
							Total			Dairy			Dairy as percent of total		
	1985	1986	1987	1985	1986	1987	1985	1986	1987	1985	1986	1987	1985	1986	1987
	- - - - - - Thousands - - - - - -												- - Percent - -		
Jan. 3	553	591	577	247	269	274	129	137	130	50	57	62	39	42	48
10	736	756	741	323	343	349	183	189	148	70	79	66	38	42	45
17	741	755	766	355	343	360	153	176	151	61	72	67	40	41	44
24	679	704	707	327	321	336	140	153	124	52	67	61	37	44	49
31	665	669	673	313	308	332	146	143	128	60	62	64	41	43	50
Feb. 7	672	655	684	313	307	316	133	144	135	58	64	67	44	44	50
14	657	651	621	301	310	303	146	121	119	59	58	59	40	48	50
21	671	638	602	311	289	292	142	126	109	59	59	56	41	47	51
28	679	676	657	323	318	326	131	136	121	60	64	66	46	47	55
Mar. 7	678	637	678	332	297	337	127	130	127	55	62	68	43	48	53
14	675	638	646	311	304	311	136	128	124	60	61	58	44	48	47
21	623	646	625	289	305	300	128	131	111	56	61	55	44	47	49
28	621	641	616	282	295	304	124	135	115	55	64	58	44	47	50
Apr. 4	612	669	652	265	315	328	118	157	121	54	89	57	46	57	47
11	640	716	649	286	354	444	119	148	114	53	97	51	45	65	45
18	659	705		322	339		126	137		53	86		42	63	
25	681	719		320	342		123	159		49	92		40	58	
May 2	684	719		344	334		115	157		48	84		42	53	
9	686	706		336	327		116	149		46	77		39	52	
16	711	731		356	339		120	156		47	74		39	47	
23	689	729		335	334		130	158		49	77		38	49	
30	600	643		288	310		113	136		41	64		36	47	
June 6	662	720		328	364		125	142		44	66		35	46	
13	673	735		344	375		110	143		42	66		38	46	
20	684	691		338	327		121	140		44	65		36	46	
27	685	731		328	343		130	147		47	69		36	47	
July 4	559	612		294	289		84	123		32	59		38	48	
11	707	734		335	342		131	149		50	73		38	49	
18	697	745		325	354		139	163		48	75		35	46	
25	678	732		331	346		119	151		45	71		38	47	
Aug. 1	659	685		319	310		114	148		46	75		40	51	
8	683	723		325	339		107	141		44	71		41	50	
15	705	767		327	361		128	150		49	78		38	52	
22	720	733		339	341		136	147		52	71		38	48	
29	706	718		334	333		133	146		53	74		40	51	
Sept. 5	613	619		295	291		111	116		46	55		41	47	
12	726	734		332	332		136	134		54	59		40	44	
19	714	722		347	352		127	145		52	66		41	46	
26	698	678		313	337		139	143		58	63		42	44	
Oct. 3	671	694		289	359		148	134		61	61		41	46	
10	692	686		300	342		147	137		57	64		39	47	
17	674	690		293	318		155	149		60	66		39	44	
24	678	688		299	323		159	150		61	60		38	40	
31	633	696		274	325		154	165		60	67		39	41	
Nov. 7	666	714		293	335		167	165		65	68		39	41	
14	669	671		285	297		174	168		68	73		39	43	
21	655	692		288	313		166	175		66	70		40	40	
28	550	594		255	282		130	133		50	53		38	40	
Dec. 3	653	685		282	298		171	174		68	74		40	43	
10	680	676		290	302		192	175		75	71		39	41	
19	670	691		297	315		168	170		68	73		40	43	
26	521	512		243	248		115	105		45	46		39	44	

calf supplies as the 1986 calf crop stabilized, resulted in a 5-percent drop in the supply of feeder calves under 500 pounds. Feeder cattle supplies will remain tight for the next couple of years. However, large supplies of competing meats at lower prices will hold down incentives for a sharp expansion in heifer retention. Thus, a large proportion of heifers will likely remain available for feedlot placement. At the same time, continued lower grain prices and reduced beef supplies will result in relatively large feedlot placements.

Cattle feeders on April 1 indicated intentions to market 7 percent fewer cattle

Table 32-April 1 feeder cattle supply

Item	1985	1986	1987	1987/ 1986
		1,000 head		% change
Calves less than 500 lb	26,436	24,431	23,084	-5.5
On farms Jan 1.				
Slaughter Jan-Mar.	820	873	768	-12.0
On feed April 1 1/	319	252	281	+11.5
Total	25,297	23,306	22,035	-5.5
Steers & Heifers 500 lb + 2/				
On farms Jan 1.	24,425	24,057	22,797	-5.2
Slaughter Jan-Mar.	6,886	6,835	6,999	+2.4
On feed April 1 1/	10,960	10,241	10,111	-1.3
Total	6,579	6,981	5,687	-18.5
Total supply	31,876	30,287	27,722	-8.5

1/ Estimated U.S. steers and heifers. 2/ Not including heifers for cow replacements.

this spring. The number of cattle on feed in the heavier weight groups is down sharply; cattle are likely to continue to be marketed at lighter weights. Thus, quarterly marketings may only be down 3 to 5 percent. The lightest weight marketings occurred in April, and many of the cattle set back by poor weather in late March were back on schedule by late April. Marketings in late May through yearend will likely remain near year-earlier levels.

Nonfed Slaughter Drop To Continue

Beef production in 1987 is expected to decline 5 to 7 percent from a year earlier. Continued large fed cattle slaughter and thus heavier average slaughter weights will be more than offset by sharp drops in nonfed slaughter this spring and summer. Reduced fed cattle marketings in April-early May plus large cow slaughter reductions will likely cause beef production to drop 9-11 percent this spring. Large feedlot placements in late winter through spring will hold up fed cattle marketings through late 1987. Feedlot profits and low grain prices will support year-to-year increases in placements. Fed marketings will rise seasonally this summer with beef production declining about 6 to 8 percent, somewhat offsetting large year-to-year declines in cow slaughter. Production in the fourth quarter is likely to decline 4 to 6 percent, but supplies could decline more seasonally in late fall. Prospective large supplies of competing meats, and fed cattle prices that slip from early spring highs combined with good grass demand for stocker cattle, could result in placements this summer being down from the high level of a year earlier.

Early Spring Price Strength

Prices for Choice fed steers in early April recorded their highest average since 1980. Tight fed cattle supplies resulted in increased competition to bid the cattle out of firm hands and prices rose to the upper $60's to low $70's in most areas.

However, as supplies rise in late spring through summer, prices are likely to decline. Prices may average in the mid $60's this spring before declining moderately to the lower $60's this summer and fall. A sluggish economy and large supplies of competing meats at declining prices will place downward pressure on continued large supplies of fed beef.

Table 33--Cattle on feed, placements, and marketings, 13 States

Item	1985	1986	1987	1987/86
	- - 1,000 head - -			Percent change
On feed Jan 1	10,653	9,754	9,235	-5
Placements, Jan.-Mar.	5,315	5,270	5,700	+8
Marketings, Jan.-Mar.	5,907	5,763	5,767	0
Other disappearance, Jan.-Mar.	373	316	371	+17
On feed April 1	9,688	8,945	8,797	-2
Steer & steer calves	5,961	5,600	5,701	+2
-500 lb	169	129	140	+9
500-699 lb	851	758	821	+8
700-899 lb	2,043	2,030	2,414	+19
900-1,099 lb	2,051	1,903	1,787	-6
1,100 + lb	847	780	539	-31
Heifers & heifer calves	3,684	3,302	3,061	-7
-500 lb	104	85	97	+14
500-699 lb	1,200	814	817	0
700-899 lb	1,524	1,483	1,388	-6
900 + lb	856	920	759	-17
Cows	43	43	35	-19
Marketings, 1/ Apr.-June	5,787	5,821	5,437	-7

1/ 1987 intentions.

Table 34--13-States cattle on feed, placements, marketings, and other disappearance 1/

Year	Cattle on feed 2/	Change previous year	Placed on feed	Change previous year	Fed cattle marketed	Change previous year	Other disappear-ance	Change previous year
	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent
1983:								
I	10,271	13.8	5,027	-9.8	5,694	4.6	451	33.0
II	9,153	3.8	5,894	2.0	5,527	6.1	450	10.0
III	9,070	1.0	5,583	-4.5	5,891	2.0	297	17.3
IV	8,465	-3.8	7,272	.8	5,436	1.2	393	6.2
Year	---	---	23,776	-2.6	22,548	3.4	1,592	16.0
1984:								
I	9,908	-3.5	5,511	9.6	5,714	.4	365	-19.1
II	9,340	2.0	5,562	-5.7	5,620	1.7	582	29.3
III	8,700	-4.1	6,252	12.0	5,684	-3.5	268	-10.1
IV	9,000	6.3	7,592	3.9	5,522	1.6	417	6.1
Year	---	---	24,917	4.5	22,540	-.1	1,632	2.5
1985:								
I	10,653	7.5	5,315	-3.6	5,907	3.4	373	2.2
II	9,688	3.7	5,206	-6.4	5,787	3.0	437	-24.9
III	8,670	-.3	5,480	-12.3	5,969	5.0	244	-9.0
IV	7,937	-11.8	7,365	-3.0	5,224	-5.4	324	-22.3
Year	---	---	23,366	-6.1	22,887	1.6	1,378	-15.6
1986:								
I	9,754	-8.4	5,270	-.8	5,763	-2.4	316	-15.3
II	8,945	-7.7	5,221	.3	5,821	.6	375	-14.2
III	7,970	-8.1	6,336	15.6	5,876	-1.6	233	-4.5
IV	8,197	3.3	6,726	-8.7	5,376	2.9	312	-3.7
Year	---	---	23,553	.8	22,836	-.2	1,236	-10.3
1987:								
I	9,235	-5.3	5,700	8.2	5,767	.1	371	17.4
II	8,797	-1.7						

1/ Revised. 2/ Beginning of quarter.

Still favorable grain prices and strong demand for stocker cattle may result in yearling feeder steers at Kansas City averaging near $70 this spring and declining to the upper $60's through fall. Utility cow prices at Omaha will remain above $40 through midsummer, before declining to the upper $30's as large supplies of processed pork and poultry compete against the reduced supply of processed beef.

Calf Slaughter Declines

Calf slaughter and veal production during the first quarter dropped 12 percent below a year ago. Reduced beef herd liquidation, lower dairy cow inventories, and strong demand for the reduced feeder cattle supply resulted in the lower slaughter. For the year, veal production is expected to drop about 14 percent below 1986.

Prices for veal calves at South St. Paul averaged $68 in the first quarter, nearly $20 per cwt above a year earlier. Prices are likely to remain in the mid-to-upper $60's for the remainder of 1987 as supplies continue well below a year ago.

SHEEP AND LAMBS

Commercial lamb and mutton production in the first quarter of 1987 was down 15 percent from a year ago. The reduction was due in part to the Easter holidays and Passover being in the second quarter this year. Production in the second quarter is expected to be slightly below a year ago. Second-half 1987 production is expected to decline from 1986 levels. Production for the year is expected to be down 6 to 8 percent from 1986. This dropoff was reflected in strong lamb prices in the first quarter of 1987. San Angelo Choice slaughter lambs averaged almost $78 in the first quarter, up from $66 a year ago. Prices are expected to rise seasonally in the second quarter and average in the $80 to $84 range. Prices for Choice slaughter lambs at San Angelo are expected to

Table 35--7-States cattle on feed, placements, and marketings

Year	On feed	Change from previous year	Net placements	Change from previous year	Marketings	Change from previous year	Other disappear-ance	Change from previous year
	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent
1984								
Jan.	8,006	-3.7	1,480	+8.5	1,569	-3.6	86	-33.8
Feb.	7,917	-1.7	1,219	+16.9	1,621	+8.7	82	-32.2
Mar.	7,515	-1.2	1,647	+30.0	1,594	-.6	117	-14.6
Apr.	7,568	+4.1	1,331	-6.5	1,523	+3.6	184	+28.7
May.	7,376	+2.1	1,579	-6.5	1,637	+3.7	219	+46.0
June	7,318	-.2	1,351	-10.9	1,544	-1.7	94	+20.5
July	7,125	-2.1	1,239	+14.7	1,553	+3.7	84	-10.6
Aug.	6,811	-.7	1,619	+8.4	1,683	+1.9	61	-30.7
Sept.	6,747	+.6	2,184	+13.2	1,489	-11.5	81	+14.1
Oct.	7,442	+7.1	2,436	+3.3	1,657	+1.9	110	+7.8
Nov.	8,221	+7.0	1,824	+14.7	1,501	+2.9	121	0.0
Dec.	8,544	+9.3	1,520	-7.1	1,429	-1.1	137	+15.1
1985								
Jan.	8,635	+7.6	1,331	-10.1	1,782	+13.6	118	+37.2
Feb.	8,184	+3.4	1,247	+2.3	1,540	-5.0	94	+14.6
Mar.	7,891	+5.0	1,494	-9.3	1,559	-2.2	98	-16.2
Apr.	7,826	+3.4	1,283	-3.6	1,603	+5.3	133	-27.7
May	7,506	+1.8	1,548	-2.0	1,604	-2.0	128	-41.6
June	7,450	+1.8	1,184	-12.4	1,577	+2.1	87	-7.4
July	7,057	-1.0	1,017	-17.9	1,670	+7.5	61	-27.4
Aug.	6,404	-6.0	1,448	-10.6	1,697	+.8	62	+1.6
Sept.	6,155	-8.8	1,909	-12.6	1,603	+7.7	79	-2.5
Oct.	6,461	-13.2	2,694	+10.6	1,573	-5.1	85	-22.7
Nov.	7,582	-7.8	1,690	-7.3	1,380	-8.1	76	-37.2
Dec.	7,892	-7.6	1,429	-6.0	1,401	-.9	111	-19.0
1986								
Jan.	7,920	-8.3	1,494	+12.2	1,750	-1.8	87	-26.3
Feb.	7,664	-6.4	1,128	-9.5	1,470	-4.5	92	-2.1
Mar.	7,322	-7.2	1,564	+4.7	1,593	+2.2	86	-12.2
Apr.	7,293	-6.8	1,445	+12.6	1,631	+1.7	120	-9.8
May	7,107	-5.3	1,624	+4.9	1,635	+1.9	132	+3.1
June	7,096	-4.8	1,095	-7.5	1,648	+4.5	67	-23.0
July	6,543	-7.3	1,480	+45.5	1,692	+1.3	64	+4.9
Aug.	6,331	-1.1	1,732	+19.6	1,659	-2.2	70	+12.9
Sept.	6,404	+4.0	2,044	+7.1	1,637	+2.1	59	-25.3
Oct.	6,811	+5.4	2,322	-13.8	1,587	+.9	81	-4.7
Nov.	7,546	-.5	1,727	+2.2	1,447	+4.9	87	+14.5
Dec.	7,826	-.8	1,301	-9.0	1,494	+6.6	104	-6.3
1987								
Jan.	7,633	-3.6	1,464	-2.0	1,803	+3.0	127	+46.0
Feb.	7,294	-4.8	1,322	+17.2	1,473	+.2	105	+14.1
Mar.	7,143	-2.4	1,665	+6.5	1,586	+.4	89	+3.5
Apr.	7,222	-1.0						

average $72 to $78 in the third quarter and $69 to $75 in the fourth quarter.

Part of the reason for the large first-quarter reduction in sheep and lamb slaughter is the apparent continued retention of ewe lambs for breeding stock. Ewes one year old and older on farms January 1, 1987, were even with a year ago, and all sheep and lambs were up 3 percent. Commercial slaughter of mature sheep during first-quarter 1987 declined 19 percent from a year ago and commercial lamb slaughter declined 16 percent. These numbers indicate a reduction in the culling of ewes and an increased retention of ewe lambs for breeding, therefore, raising expectations for a larger inventory and increased production in 1988.

Table 36--Great Plains custom cattle feeding: Selected costs at current rates 1/

Purchased during: Marketed during:	Mar. Sept.	Apr. Oct.	May Nov.	Jun. Dec.	July Jan. '87	Aug. Feb.	Sept. Mar.	Oct. Apr.	Nov. May	Dec. June	Jan. July	Feb. Aug.
EXPENSES: ($/head)												
600 lb feeder steer	354.18	330.90	325.68	329.28	366.48	381.78	381.00	369.90	376.50	381.48	398.82	421.86
Transportation to feedlot (300 miles)	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96
Commission	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Feed:												
Milo (1500 lb) 3/	67.65	70.05	74.70	74.85	63.00	55.65	53.25	50.10	45.75	50.25	46.95	46.05
Corn (1500 lb) 3/	76.65	78.60	82.20	81.75	69.60	60.30	54.90	52.05	55.20	57.15	55.20	52.65
Cotton seed meal (400 lb)	40.00	40.00	42.00	42.00	40.40	40.40	40.40	40.80	40.80	40.80	45.20	45.20
Alfalfa hay (800 lb)	44.40	45.20	42.80	39.20	39.60	39.60	40.80	40.80	40.40	43.60	43.20	45.20
Total feed cost	228.70	233.85	241.70	237.80	212.60	195.95	189.35	183.75	182.15	191.80	190.55	189.10
Feed handling and management charge	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
Vet medicine	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Interest on feeder and 1/2 feed	29.28	24.63	24.56	24.65	24.23	24.59	24.38	21.93	22.21	22.68	23.47	24.53
Death loss	5.31	4.96	4.89	4.94	5.50	5.73	5.72	5.55	5.65	5.72	5.98	6.33
Marketing 2/	F.O.B.	F.O.B.	F.O.B.	F.O.B.	F.O.B.	F.O.B.	F.O.B.	F.O.B.	F.O.B.	F.O.B.	F.O.B.	F.O.B.
Total	648.44	625.30	627.78	627.63	639.77	639.00	631.40	612.09	617.47	632.64	649.78	672.78
Selling price required to cover: 3/												
Feed and feeder cost (1056 lb) $/cwt	55.20	53.48	53.73	53.70	54.84	54.71	54.01	52.43	52.90	54.29	55.81	57.86
All costs $/cwt	61.40	59.21	59.45	59.43	60.58	60.51	59.79	57.96	58.47	59.91	61.53	63.71
Selling price $/cwt 5/	60.44	61.90	63.73	61.45	60.61	64.09						
Net margin $/cwt	-0.96	2.69	4.28	2.02	0.03	3.58						
Cost per 100 lb Gain:												
Variable cost less interest $/cwt	51.60	52.56	54.12	53.35	48.42	45.14	43.81	42.66	42.36	44.30	44.11	43.89
Feed costs $/cwt	45.74	46.77	48.34	47.56	42.52	39.19	37.87	36.75	36.43	38.36	38.11	37.82
Prices:												
Choice Steer Price 9-11 Tex-NM Direct	60.44	61.90	63.73	61.45	60.61	64.09						
Choice feeder steer 600-700 lb Amarillo	59.03	55.15	54.28	54.88	61.08	63.63	63.50	61.65	62.75	63.58	66.47	70.31
Transportation rate $/cwt/100 miles 6/	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Commission fee $/cwt	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Milo $/cwt	4.36	4.52	4.83	4.84	4.05	3.56	3.40	3.19	2.90	3.20	2.98	2.92
Corn $/cwt	4.96	5.09	5.33	5.30	4.49	3.87	3.51	3.32	3.53	3.66	3.53	3.36
Cottonseed Meal (41%) $/cwt 7/	10.00	10.00	10.50	10.50	10.10	10.10	10.10	10.20	10.20	10.20	11.30	11.30
Alfalfa hay $/ton 8/	81.00	83.00	77.00	68.00	69.00	69.00	72.00	72.00	71.00	79.00	78.00	83.00
Feed handling and management charge $/ton	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Interest, annual rate	12.50	11.00	11.00	11.00	10.25	10.25	10.25	9.50	9.50	9.50	9.50	9.50

1/ Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with experience of individual feedlots. For individual use, adjust expenses and prices for management, production level, and locality of operation. Steers are assumed to gain 500 lbs in 180 days at 2.8 lbs per day with feed conversion of 8.4 lbs per pound gain. Revisions have been made per annual Agricultural Prices. 2/ Most cattle sold f.o.b. at the feedlot with 4-percent shrink. 3/ Texas Panhandle elevator price plus $0.15/cwt handling and transportation to feedlots. 4/ Sale weight 1,056 lbs (1,100 lbs less 4-percent shrink). 5/ Choice slaughter steers, 900-1100 lbs, Texas-New Mexico direct. 6/ Converted from cents per mile for a 44,000-lb haul. 7/ Average prices paid by farmers in Texas. 8/ Average price received by farmers in Texas plus $30/ton handling and transportation to feedlots.

Table 37--Corn Belt cattle feeding: Selected costs at current rates 1/

Purchased during: Marketed during:	Mar. Sept.	Apr. Oct.	May Nov.	Jun. Dec.	July Jan. '87	Aug. Feb.	Sept. Mar.	Oct. Apr.	Nov. May	Dec. June	Jan. July	Feb. Aug.
Expenses:												
600 lb. feeder steer	379.32	361.92	362.40	351.00	366.00	394.50	393.00	390.60	384.78	390.00	414.00	428.28
Transportation to feedlot-400 miles	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28
Corn (45 bu)	102.60	102.60	107.10	104.85	88.65	73.35	62.55	59.40	64.80	66.60	63.00	59.85
Silage (1.7 tons)	33.97	33.97	33.55	32.71	27.96	24.65	23.32	22.44	24.72	25.34	25.08	24.91
Protein supplement (270 lb)	31.05	31.86	31.86	31.86	31.86	31.86	31.86	32.94	32.94	32.94	32.67	32.67
Hay (400 lb)	10.40	10.40	9.50	9.20	8.00	7.70	8.20	8.00	8.90	9.10	9.40	9.70
Total feed costs	178.02	178.83	182.01	178.62	156.48	137.56	125.93	122.78	131.36	133.98	130.15	127.13
Labor (4 hours)	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72
Management (1 hr.) 2/	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86
Vet Medicine 3/	5.26	5.21	5.21	5.21	5.21	5.21	5.21	5.12	5.12	5.12	5.13	5.13
Interest on purchase (6 months)	24.09	22.44	22.47	21.76	21.59	23.28	23.19	22.07	21.74	22.04	22.98	23.77
Power, equip., fuel, shelter, depreciation 3/	24.55	24.29	24.29	24.29	24.31	24.31	24.31	23.87	23.87	23.87	23.91	23.91
Death loss (1% of purchase)	3.79	3.62	3.62	3.51	3.66	3.95	3.93	3.91	3.85	3.90	4.14	4.28
Transportation (100 miles)	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31
Marketing expenses	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35
Miscellaneous and indirect costs 3/	10.62	10.50	10.50	10.50	10.51	10.51	10.51	10.32	10.32	10.32	10.34	10.34
Total	660.17	641.32	645.03	629.41	622.28	633.84	620.60	613.19	615.56	623.75	645.18	657.37
Selling price per cwt. required to cover:												
Feed and feeder costs (1050 lb) $/cwt	53.08	51.50	51.85	50.44	49.76	50.67	49.42	48.89	49.16	49.90	51.82	52.90
All costs (1050 lb) $/cwt	62.87	61.08	61.43	59.94	59.27	60.37	59.10	58.40	58.63	59.40	61.45	62.61
Feed cost per 100 lb gain (450 lb) $/cwt	39.56	39.74	40.45	39.69	34.77	30.57	27.98	27.28	29.19	29.77	28.92	28.25
Choice steers, Omaha (900-1100 lb) $/cwt	59.43	59.73	61.54	59.82	58.79	61.02						
Net margin $/cwt	-3.44	-1.35	0.11	-0.12	-0.48	0.65						
Prices:												
Choice steers, Omaha (900- 1100 lb) $/cwt	59.43	59.73	61.54	59.82	58.79	61.02						
Feeder steer, Choice (600-700 lb) Kansas City $/cwt	63.22	60.32	60.40	58.50	61.00	65.75	65.50	65.10	64.13	65.00	69.00	71.38
Corn $/bu 4/	2.28	2.28	2.38	2.33	1.97	1.63	1.39	1.32	1.44	1.48	1.40	1.33
Hay $/ton 4/	52.00	52.00	47.50	46.00	40.00	38.50	41.00	40.00	44.50	45.50	47.00	48.50
Corn silage $/ton 5/	19.98	19.98	19.74	19.24	16.45	14.50	13.72	13.20	14.54	14.91	14.76	14.65
Protein supplement (32-36%) $/cwt	11.50	11.80	11.80	11.80	11.80	11.80	11.80	12.20	12.20	12.20	12.10	12.10
Farm labor $/hour	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93
Interest rate, annual	12.70	12.40	12.40	12.40	11.80	11.80	11.80	11.30	11.30	11.30	11.10	11.10
Transportation rate $/cwt. per 100 miles 7/	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Marketing expenses $/cwt 8/	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35
Index of prices paid by farmers (1910-14=100)	1120.00	1108.00	1108.00	1108.00	1109.00	1109.00	1109.00	1089.00	1089.00	1089.00	1091.00	1091.00

1/ Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with experience of individuals for management, production level, and locality of operation. Revisions have been made per annual Agricultural Prices. 2/ Assumes 1 hour at twice the labor rate. 3/ Adjusted monthly by the index of prices paid by farmers for commodities, services, interest, taxes, and wage rates. 4/ Average price received by farmers in Iowa and Illinois. 5/ Corn silage price derived from an equivalent price of 5 bushels corn and 330 lb hay. 6/ Average price paid by farmers in Iowa and Illinois. 7/ Converted from cents/mile for a 44,000-pound haul. 8/ Yardage plus commission fees at a Midwest terminal market. *Preliminary.

Table 38--Imports of feeder cattle, calves and hogs from Canada and Mexico

Year and month	Feeder cattle and calves		Hogs
	Canada	Mexico	Canada
	Number		
1984			
Jan.	13,599	113,941	92,407
Feb.	21,982	93,813	87,962
Mar.	25,415	70,945	94,035
Apr.	34,335	27,318	114,760
May	33,653	14,051	97,358
June	28,730	1,799	117,160
July	39,067	15,055	137,082
Aug.	35,307	415	120,698
Sept.	35,999	10,896	90,282
Oct.	32,490	2,885	116,121
Nov.	26,372	533	112,086
Dec.	22,138	38,531	142,064
Total	349,087	390,185	1,322,015
1985			
Jan.	16,447	59,670	184,294
Feb.	32,962	4,416	142,330
Mar.	64,416	4,767	213,490
Apr.	53,996	4,303	89,183
May	34,615	15,684	1/124,103
June	21,872	26,073	108,799
July	13,124	21,278	1/108,481
Aug.	13,343	16,105	65,195
Sept.	13,963	16,884	48,421
Oct.	18,039	4,147	37,371
Nov.	28,747	101,638	38,630
Dec.	1/26,796	201,513	65,854
Total	338,320	476,478	1/1,226,151
1986			
Jan.	23,604	142,416	70,480
Feb.	27,346	75,302	47,021
Mar.	24,181	77,763	29,067
Apr.	20,536	54,507	33,260
May	21,734	102,787	25,128
June	18,511	41,353	38,926
July	25,485	53,808	81,333
Aug.	18,084	35,650	51,789
Sept.	16,122	20,333	41,133
Oct.	9,404	11,957	32,937
Nov.	13,938	203,827	21,013
Dec.	1/8,593	1/336,228	1/31,628
Total	1/227,538	1/1,155,931	1/503,715
1987			
Jan.	13,615	108,916	48,558
Feb.	19,154	131,631	20,745

1/ Revised.

Table 39--Commercial sheep and lamb slaughter 1/ and production

Year	Lambs and year-lings	Mature sheep	Total 2/	Average dressed weight	Commer-cial produc-tion 2/
	- - 1,000 head - -			Pounds	Mil lb
1983:					
I	1,533	91	1,624	57	93
II	1,441	135	1,576	56	89
III	1,597	142	1,739	54	94
IV	1,555	125	1,680	54	91
Year	6,126	493	6,619	55	367
1984:					
I	1,611	104	1,715	57	98
II	1,544	162	1,706	54	92
III	1,513	146	1,659	53	88
IV	1,559	119	1,678	55	93
Year	6,227	531	6,758	55	371
1985:					
I	1,539	90	1,629	57	93
II	1,363	118	1,481	56	83
III	1,403	114	1,417	56	85
IV	1,460	92	1,551	59	91
Year	5,765	414	6,078	228	352
1986:					
I	1,403	72	1,472	60	89
II	1,246	97	1,342	58	78
III	1,322	80	1,402	57	80
IV	1,305	72	1,377	59	81
Year	5,311	321	5,632	58	328
1987:					
I 3/	1,213	58	1,270	60	76

1/ Class estimated. 2/ May not add due to rounding. 3/ Preliminary.

FARROW-TO-FINISH HOG PRODUCTION BUDGETS

by

Russell Bowe and Leland Southard*

Abstract: About 80 percent of all hogs produced in the United States are grown in the North Central States, where four out of five hogs are grown on farrow-to-finish operations. The Economic Research Service (ERS) has computed and published annual budgets on hog production since 1976. To provide the industry with frequent budget estimates, the annual North Central 1,600-head budget has been modified to provide monthly estimates. By monitoring monthly measures of producers' returns, analysts will be in a better position to determine the direction and status of the hog cycle.

Key words: Farrow-to-finish, hog, budget, cost-of-production

Introduction

Many people associated with the pork industry have expressed a wish for more current information on producers' returns from hog production throughout the year. In response, the Economic Research Service (ERS) has developed a monthly farrow-to-finish budget to complement the current monthly hog finishing budgets that are regularly published in the *Livestock and Poultry Situation and Outlook.*

This article explains the origin and development of the farrow-to-finish hog production budget, which will be a regular feature of the *Livestock and Poultry Situation and Outlook.* About 80 percent of all hogs produced in the United States are grown in the North Central region, where four out of five hogs are grown on farrow-to-finish operations.1/ The remaining hogs are produced in a two-stage operation by specialized feeder pig producers (selling pigs weighing 40 to 60 pounds) and feeder pig finishers who purchase feeder pigs and raise them to slaughter weight.

ERS has estimated and published annual budgets on hog production by type of producer and geographical area since 1976. These budgets are published midsummer in the *Economic Indicators of the Farm Sector: Costs of Production.* The budgets provide cost and return estimates for a typical farrow-to-finish operation in the North Central States marketing about 1,600 hogs per year. Both the monthly and annual budgets are constructed using similar technical coefficients and price series. Slight modifications mostly to machinery and equipment costs were made to accommodate monthly calculations. This may result in minor differences from the annual budgets. In addition, both budgets will be updated using the Farm Costs and Returns Survey (FCRS) data for hogs. The last survey was conducted early in 1986 and data are now being analyzed.

Characteristics of North Central Farrow-to-Finish Operations

The choice of a North Central farrow-to-finish operation that markets about 1,600 hogs per year for monthly budgeting was based largely on two recent ERS studies, the *U.S. Hog Industry* and *Economics of Size in Hog Production* (Van Arsdall and Nelson). Based on a 1981 Hog Cost of Production Survey, and supplementary data from the 1982 Census of Agriculture, the 1,600 head annual

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1/ States in the North Central region include: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, South Dakota, and Wisconsin.

sales reflect a slightly larger than median operation. However, the trend is toward bigger units. Annual surveys by the National Agricultural Statistics Service (NASS) indicate that larger operations are producing a larger share of the Nation's hogs. In addition, University of Illinois farm records indicate that these hog producers are using facilities with an average age of 7 years, compared with an average of over 20 years for smaller producers. Larger producers with annual sales of 3,000 and over 10,000 head are using facilities with an average age of 6 and 3 years, respectively. Two other characteristics were also associated with these producers: sole proprietorship, and the sale of, rather than full feeding, of the corn crop.

Methodology

The budget assumes that 1,540 slaughter hogs are marketed annually at 230 pounds and 60 cull sows at 360 pounds. The number of pigs per litter and breeding herd size are held constant throughout the year.

Prices for slaughter hogs and cull sows are weighted averages of prices received for barrows and gilts, and sows as reported in *Agricultural Prices*. The slaughter hog and cull sow prices are for the current marketing month are weighted according to the percent of hog production in the following States: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, South Dakota, and Wisconsin.

All variable and fixed expenses as well as capital replacement costs in the farrow-to-finish budget are adjusted using a weighted average of prices or prices paid indexes 10 months and 4 months prior to when marketing occurs. Input costs (lagged 10 months) account for 32 percent of total input costs and reflect prices paid for the quantity of feed and other inputs for the 6 months required to sustain the breeding herd. A 4-month lag for costs reflects 68 percent of feed and other inputs used from weaning to marketing of slaughter hogs. For example, the price of corn used for the marketing month of January 1986 is determined by using the March 1985 average price of $2.63 per bushel converted to $.047 per pound. This figure is then multiplied by the 105.8 pounds of corn fed from March through August. This figure is added to the September 1985 price of $2.27 per bushel or $.0405 per pound times 239.8 pounds of corn fed from September through December to derive an average corn feed cost of $14.70 per hog cwt marketed.

Much of the corn fed to hogs--about 85 percent in the North Central region--is produced on the same farm operation. To reflect the market value of nonpurchased inputs, corn is valued at the State-weighted average of prices received by farmers for the appropriate months reported in *Agricultural Prices*.

Purchased soybean meal and mixing concentrates must supplement corn to meet the nutritional requirements of hogs. Soybean meal (44 percent protein) is valued at the State-weighted average of reported prices paid for the appropriate month less $.76 per cwt to reflect price discounts associated with volume purchases. The mixing concentrate (sometimes referred as premix) cost is adjusted by the prices paid by farmers for agricultural chemicals on a quarterly basis found in *Agricultural Prices*.

Other expense items include veterinary and medicine, fuel, lube and electricity, machinery and equipment repairs, hired labor, and miscellaneous. These expenses are based upon 1984 yearly Cost of Production (COP) budget estimates and are updated quarterly for the monthly budget using various indexes provided by NASS (table 1). In some cases, when an appropriate price index was not available, existing indexes were weighted together based on unpublished COP work notes. Veterinary and medicine expenses include a charge for medications added to feed and are updated using prices paid by farmers for agricultural chemicals (56 percent) and wage rates (44 percent). Adjustments for fuel, lube and electricity were made using the prices paid for fuels and energy. Machinery and buildings are adjusted by a combination of prices paid by farmers for building and fencing materials (64 percent) and farm and motor supplies (36 percent). Hired labor costs are updated using the change in wage rates. Marketing, hauling, and bedding costs are included in miscellaneous expenses and are adjusted using the prices paid for production items with nonfarm origin.

Table 1--Selected indexes of prices paid by farmers, United States

Item	1983	1984				1985				1986			
		I	II	III	IV	I	II	III	IV	I	II	III	IV
Agricultural chemicals	125	126	128	129	129	128	127	128	128	128	126	126	126
Fuels and energy	202	203	203	200	199	194	203	203	204	196	160	155	153
Farm and motor supplies	152	148	147	147	147	148	147	145	144	145	144	144	143
Autos and trucks	170	178	181	182	187	189	192	193	197	198	197	197	199
Tractors and self-propelled machinery	174	178	181	182	182	182	179	176	174	174	175	175	172
Other machinery and implements	171	175	179	182	183	182	182	184	184	184	184	184	184
Building and fencing materials	138	138	138	137	137	137	136	136	136	136	135	136	136
Interest	251	250	250	250	250	232	232	232	232	207	207	207	207
Taxes	129	132	132	132	132	133	133	133	133	134	134	134	134
Wage Rates	148	150	150	150	149	153	157	154	149	149	164	166	158
Production items with non-farm origin	160	162	164	164	163	163	163	163	161	158	156	156	154

Source: Agricultural Prices. 1977=100.

Fixed cash expenses consist of taxes and insurance, general farm overhead (GFO) and interest expense. Taxes and insurance costs are updated in the monthly budget by the prices paid index for taxes. ERS estimates GFO costs from information obtained from the annual Farm Costs and Returns Survey (FCRS) and allocates these costs to the hog enterprise on the basis of total farm receipts. GFO for these budgets are based on the 1984 FCRS and adjusted quarterly by the prices paid for production items with nonfarm origin index. The FCRS also provides data on cash interest expenses for both short and long term obligations. Interest expenses are also allocated to the enterprise based on its share of total farm receipts. Interest for the monthly budgets is based upon the 1984 FCRS and is adjusted quarterly by the prices paid for interest.

The capital replacement charge is based upon current prices for machinery, equipment, and breeding livestock and reflects the investment needed to maintain a constant production capacity over time. Capital replacement costs are updated for the monthly budgets using the prices paid index for tractors and self-propelled equipment (23 percent), other machinery (3 percent), building and fencing (64 percent), and the quarterly change in barrows and gilts and sow prices received for the region (10 percent).

Interpretation and Uses of the Budgets

The per cwt marketed numbers available in farrow-to-finish budgets are useful for farm and industry management, planning, financial analysis, and agricultural policy perspectives. The annual cost-of-production estimates provide four measures of returns per cwt, 2/ but different types of decisions can dictate the appropriate measure to use. Since the monthly budgets are designed to provide data for relatively short-term perspectives, only two of the measures of returns are estimated on a monthly basis: cash receipts less cash costs, and cash receipts less cash expenses plus replacement costs.

Cash expenses per cwt reflect the short-run, out-of-pocket variable costs incurred. At the breakeven point (cash receipts equal to cash expenses) there is little incentive to produce hogs and some producers will consider completely discontinuing production. This may be the shutdown point in

2/ These four measures are cash receipts less cash expenses, cash receipts less cash expenses and replacement, residual returns to management and risk and total, returns to owned inputs. These measures are described in the *Economic Indicators of the Farm Sector: Cost of Production, 1982-1985* series.

production for the typical producer. In addition, this measure indicates the cash flow available for living expenses, replacing machinery, equipment, and buildings, repaying debts, or financing other farm enterprises. Although this measure is also available in annual form, a monthly budget provides the user with information for current decisionmaking and also provides a picture of seasonal monthly cash flows which may be masked by the annual numbers. Monthly budgets also provide more data for operators to project what stage the hog cycle is in or could be headed in the coming months.

During 1980–85, cash receipts above cash expenses were not high enough to pay the producer a competitive wage for his unpaid labor during three of those years. In only one year were cash receipts large enough to provide a return above competitive wages.

Cash expenses with replacement costs reflect the addition of capital replacement and the dollars needed to replace and maintain the building and equipment typically used to produce hogs. For an operator to continue to produce hogs, the physical plant must be maintained and equipment replaced. Producers in the short term can delay repairs or purchases if conditions warrant, but the amount of capital depletion that can be absorbed by such delay is limited. The breakeven point is where cash receipts less cash expenses and replacement costs define the level of returns that are needed for sustained production. During 1980–85, cash receipts exceeded cash expenses and replacement costs only in 1982. In 1983, producers began expanding their breeding herd. However, due to falling hog prices and rising feed costs, cash receipts did not exceed cash expenses and replacement costs, and producers began liquidating their herds. Throughout most of 1985 and first-half 1986, cash receipts were below or near cash expenses and replacement costs.

Table 2--Farrow-to-finish hog production, yearly average costs and returns, 1,600 head, North Central region, per cwt sold, 1980-86

ITEM	1980	1981	1982	1983	1984	1985	1986
Cash receipts:							
Market hogs (94.25 lbs)	37.35	41.59	51.62	44.59	45.80	41.97	47.94
Cull sows (5.75 lbs)	2.02	2.26	2.84	2.32	2.42	2.18	2.53
Total	39.37	43.85	54.46	46.91	48.22	44.15	50.47
Cash expenses							
Feed-- 1/							
Corn (345.6 lbs)	16.42	17.84	14.44	18.33	18.76	15.37	13.94
Soybean meal (70.6 lbs)	8.65	9.11	8.43	9.03	8.11	6.05	6.43
Mixing concentrates (14.3 lbs)	2.65	2.72	2.79	2.86	2.93	3.00	2.92
Total feed	27.72	29.67	25.66	30.22	29.80	24.42	23.29
Other--							
Veterinary and medicine 2/	.66	.68	.71	.74	.76	.76	.75
Fuel, lube, and electricity	1.53	1.78	1.77	1.70	1.59	1.50	1.60
Machinery and building repairs	2.11	2.34	2.43	2.46	2.46	2.45	2.41
Hired labor	.91	1.18	1.27	1.18	1.20	1.25	1.25
Miscellaneous	.61	.60	.61	.59	.64	.62	.62
Total, variable expenses	33.54	36.25	32.45	36.89	36.45	31.00	29.92
General farm overhead	.92	1.14	1.13	1.61	1.31	1.20	1.33
Taxes and insurance	.58	.67	.74	.77	.77	.77	.69
Interest	3.45	4.27	5.48	4.70	5.02	4.44	4.55
Total, fixed expenses	4.95	6.07	7.35	7.08	7.10	6.40	6.57
Total, cash expenses 3/	38.49	42.32	39.80	43.97	43.55	37.40	36.49
Receipts less cash expenses	.88	1.53	14.66	2.94	4.67	6.75	13.98
Capital replacement	5.06	5.58	5.78	5.85	5.81	5.81	5.68
Receipts less cash expenses and replacement	-4.18	-4.05	8.88	-2.91	-1.14	.94	8.30

1/ Feed prices are weighted average state prices and will not equal prices used in the monthly updated budgets. 2/ The veterinary and medicine expense includes costs for feed medication, is usually included as part of the feed cost. 3/ Cash expenses do not include a charge for family or operator labor (.732 hours) or a charge for land and fixed assets.

Table 3--Farrow-to-finish hog production costs and returns, 1,600 head annual sales, North Central
January 1985 through July 1987

Item	Jan.	Feb.	Mar.	Apr.	May	1985 June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	1986 Feb.	Mar.	Apr.
Cash receipts: 2/																
Market hogs (94.25 lbs)	45.97	45.99	41.25	38.99	39.34	42.81	44.23	40.81	37.87	41.39	41.29	43.75	42.47	40.72	38.45	37.56
Cull sows (5.75 lbs)	2.36	2.54	2.35	2.29	2.11	2.12	2.10	2.03	1.95	2.07	2.14	2.11	2.10	2.16	2.13	2.13
Total	48.33	48.53	43.60	41.28	41.45	44.93	46.33	42.84	39.82	43.46	43.43	45.86	44.57	42.88	40.58	39.69
Cash expenses																
Feed-- 3/																
Corn (345.6 lbs)	18.50	17.48	17.14	17.11	17.25	16.97	16.77	16.38	16.13	15.98	15.96	16.57	14.70	14.10	14.35	14.55
Soybean meal (70.6 lbs)	8.00	7.78	7.60	7.36	7.04	6.92	6.62	6.40	6.20	6.03	6.02	5.99	5.98	6.07	6.05	6.08
Mixing concentrates (14.3 lbs)	2.93	2.95	2.95	2.95	2.94	2.94	2.94	2.93	2.93	2.93	2.93	2.93	2.93	2.92	2.92	2.92
Total feed	29.43	28.21	27.69	27.42	27.23	26.83	26.33	25.71	25.26	24.94	24.91	25.49	23.61	23.09	23.32	23.55
Other--																
Veterinary and medicine 4/	.75	.76	.76	.76	.76	.76	.76	.76	.76	.76	.76	.76	.76	.75	.75	.75
Fuel, lube, and electricity	1.66	1.65	1.65	1.65	1.63	1.63	1.63	1.66	1.66	1.66	1.65	1.65	1.65	1.67	1.67	1.67
Machinery and building repairs	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.43	2.43	2.43	2.42	2.42	2.41	2.41	2.41	2.41
Hired labor 5/	1.20	1.20	1.20	1.20	1.22	1.22	1.22	1.24	1.24	1.24	1.23	1.23	1.21	1.21	1.21	1.21
Miscellaneous	.64	.64	.64	.64	.64	.64	.64	.64	.64	.64	.64	.64	.64	.63	.63	.63
Total, variable expenses	36.12	34.90	34.38	34.11	33.92	33.52	33.02	32.44	31.99	31.67	31.61	32.19	30.28	29.76	29.99	30.22
General farm overhead	1.32	1.32	1.19	1.12	1.13	1.22	1.26	1.16	1.08	1.18	1.18	1.25	1.20	1.15	1.09	1.06
Taxes and insurance	.78	.76	.76	.76	.76	.76	.76	.74	.74	.74	.73	.73	.70	.70	.70	.70
Interest	5.03	5.05	4.54	4.30	4.10	4.44	4.58	4.24	3.94	4.30	4.20	4.43	4.31	4.14	3.92	3.55
Total, fixed expenses	7.13	7.13	6.49	6.18	5.99	6.42	6.60	6.14	5.76	6.22	6.11	6.41	6.21	5.99	5.71	5.31
Total, cash expenses 6/	43.25	42.03	40.87	40.29	39.91	39.94	39.62	38.58	37.75	37.89	37.72	38.60	36.49	35.75	35.70	35.53
Receipts less cash expenses	5.08	6.50	2.73	0.99	1.54	4.99	6.71	4.26	2.07	5.57	5.71	7.26	8.08	7.13	4.88	4.16
Capital replacement	5.82	5.80	5.80	5.80	5.81	5.81	5.81	5.72	5.72	5.72	5.70	5.70	5.67	5.67	5.67	5.66
Receipts less cash expenses and replacement	-.74	.70	-3.07	-4.81	-4.27	-.82	.90	-1.46	-3.65	-.15	.01	1.56	2.41	1.46	-.79	-1.50

ITEM	May	June	July	1986 Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	1987 Apr.	May	June	July
Cash receipts: 2/															
Market hogs (94.25 lbs)	43.85	50.86	56.90	59.61	55.50	50.42	50.27	48.74	45.06	45.92	45.13	48.13			
Cull sows (5.75 lbs)	2.30	2.57	2.83	3.11	3.10	2.80	2.68	2.42	2.42	2.37	2.38	2.60			
Total	46.15	53.43	59.73	62.72	58.60	53.22	52.95	51.16	47.48	48.29	47.51	50.73			
Cash expenses															
Feed-- 3/															
Corn (345.6 lbs)	14.59	14.83	13.94	13.68	14.18	14.10	12.81	11.40	10.17	9.97	10.57	10.67	9.91	9.06	8.79
Soybean meal (70.6 lbs)	6.29	6.37	6.50	6.62	6.72	6.75	6.87	6.92	6.95	6.98	7.02	6.99	6.83	6.83	6.83
Mixing conentrates (14.3 lbs)	2.93	2.93	2.93	2.90	2.90	2.90	2.90	2.90	2.90	2.89	2.89	2.89	2.89	2.89	2.89
Total feed	23.81	24.13	23.37	23.20	23.80	23.75	22.58	21.22	20.02	19.84	20.48	20.55	19.63	18.78	18.51
Other--															
Veterinary and medicine 4/	.75	.75	.75	.75	.75	.75	.75	.75	.75	.74	.74	.74	.74	.74	.74
Fuel, lube, and electricity	1.64	1.64	1.64	1.52	1.52	1.52	1.49	1.49	1.49	1.43	1.43	1.43	1.44	1.44	1.44
Machinery and building repairs	2.41	2.41	2.40	2.40	2.40	2.41	2.41	2.41	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Hired labor 5/	1.21	1.21	1.28	1.28	1.28	1.29	1.29	1.29	1.28	1.28	1.28	1.29	1.29	1.29	1.27
Miscellaneous	.63	.63	.63	.63	.63	.62	.61	.61	.61	.61	.61	.61	.61	.61	.61
Total, variable expenses	30.45	30.77	30.07	29.78	30.38	30.34	29.13	27.77	26.55	26.30	26.94	27.02	26.11	25.26	24.97
General farm overhead	1.23	1.42	1.57	1.65	1.54	1.39	1.38	1.33	1.22	1.24	1.22	1.31	1.27	1.27	1.26
Taxes and insurance	.70	.70	.68	.68	.68	.68	.68	.68	.64	.64	.64	.64	.64	.64	.62
Interest	4.12	4.78	5.34	5.61	5.24	4.59	4.56	4.41	4.09	4.16	4.09	4.28	4.17	4.17	4.17
Total, fixed expenses	6.05	6.90	7.59	7.94	7.46	6.66	6.62	6.42	5.95	6.04	5.95	6.23	6.08	6.08	6.05
Total, cash expenses 6/	36.50	37.67	37.66	37.72	37.84	37.00	35.75	34.19	32.50	32.34	32.89	33.25	32.19	31.34	31.02
Receipts less cash expenses	9.65	15.76	22.07	25.00	20.76	16.22	17.20	16.97	14.98	15.95	14.62	17.48			
Capital replacement	5.66	5.66	5.68	5.68	5.68	5.70	5.70	5.70	5.69	5.69	5.69	5.70	5.7[illegible]	5.[illegible]	5.69
Receipts less cash expenses and replacements	3.99	10.10	16.39	19.32	15.08	10.52	11.50	11.27	9.29	10.26	8.93	11.78			

1/ The feed rations and expense items do not necessarily coincide with the experience of individual [illegible] are an average of a group of operators. For individual use, adjust expenses and prices for management, productio[illegible] and locality of operation. 2/ Cash receipts are based on 94.25 lbs of barrows and gilts liveweight and 5.75 lbs of [illegible] per cwt sold. 3/ Feed costs are based on 345.6 lbs of corn and 70.3 lbs soybean meal, 14.6 lbs of mixing concentrates. 4/ The veterinary and medicine expense includes costs for feed medication, that is usually included as part of [illegible]. 5/ Hired labor charge is based on .204 hours per cwt of liveweight hog marketed. 6/ Cash expenses do [illegible] charge for family or operator labor (.732 hours) or a charge for land and fixed assets.

In this situation, producer decisions to raise hogs and pigs depend upon the outlook for the future and the financial condition of the operation. Producers continued to reduce their herds. However, hog prices rallied sharply around midyear 1986 and cash receipts greatly exceeded cash costs and returns and replacement costs. This situation prompted some industry observers to wonder if the September *Hogs and Pigs* report would indicate future expansion. However, the report indicated that producers planned to reduce production even further. Evidently, producers are using some of the additional current cash flow to repay debts or renovate equipment and facilities that were not maintained during the prolonged period of poor returns since 1980.

Returns continued to exceed cash and replacement costs through early 1987. The March *Hogs and Pigs* report indicated that producers are expanding production but at a more moderate rate than in past hog cycles.

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THE EFFECTS OF CHANGES IN THE BROILER HATCHERY SUPPLY FLOCK ON PRODUCTION

by

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Abstract: Changes in the hatchery supply flock provide an early indicator of future changes in broiler production. The relationship reflects economic considerations, biological constraints, seasonal differences in supply and demand, and improved efficiency in the sector. Results indicate a significant seasonal pattern in the effects of the hatchery supply flock on broiler production. Inelastic short–run supply responses to changes in broiler prices and feed costs beyond what is already incorporated into the laying flock through longer–run expansion/contraction decisions are also indicated. Using the estimated relationship, the current large buildup of the hatchery supply flock suggests an increase in broiler slaughter in the second half of 1987 of nearly 10 percent.

Keywords: Broiler production, hatchery supply flock, net returns, seasonality.

Introduction

The U.S. broiler industry has steadily grown over the last few decades, with production increasing almost every year since the 1950's. Following periods of very low returns, production generally has remained level but then has increased again after returns have improved. Broilers have a very short production cycle (10 to 12 weeks) compared with other meat animals (9 to 10 months for hogs, for example). Also in contrast to other meats, a relatively small number of firms account for most of broiler

production. As a result, the broiler industry can respond to changing economic conditions faster than producers of other meats. In conjunction with this growth in broiler production, chicken has captured a greater share of total red meat and poultry consumption.

Because of the growth in the broiler industry, short-term changes in broiler production are increasingly important for the meat sector and for consumers. Changes in the size of the hatchery supply flock, which provides fertile eggs for producing broilers, typically signal adjustments in future broiler production. For example, as net returns to broiler production improved in late 1986 and early 1987, largely in response to lower feed costs, broiler producers began adding more pullets to the hatchery supply flock, leading to increased chicken supplies this year. This article examines how broiler production changes can be related to earlier changes in the hatchery supply flocks.

Factors Affecting Production

Major factors that are important for determining the size and timing of broiler production include economic considerations, biological constraints, seasonal variation in supply and demand, and improved efficiency in the sector.

When economic conditions are favorable, broiler producers tend to expand production. A good summary measure of economic conditions in the sector is net returns--the difference between wholesale prices and costs per pound. Wholesale broiler prices can be affected by changes in production of broilers, production of competing meats, or consumer demand. Major cost components in the measure of net returns are feeds, processing, and marketing. Feed costs, which are based on a ration of 70 percent corn and 30 percent soybean meal, were stable in the 1960's but have been more volatile in the 1970's and 1980's with sharp declines over the last year. During the oil embargoes in the 1970's, higher energy prices raised costs of production, processing, and marketing in the industry. The world oil market declined sharply in 1986, reducing energy-related costs, but has begun to strengthen this year as OPEC has agreed to production controls.

Most of the economic incentives underlying longer run broiler production changes are embodied in the size of the hatchery supply flock because any longer run expansion/contraction decisions must ultimately affect this production base. Economic factors can also affect broiler production through short-run management practices--producers can change the number of eggs from the hatchery supply flock that are used for hatching by altering the numbers that are exported or sold to breakers.

When longer-run expansion/contraction decisions are made, the size of the hatchery supply flock is altered and production responses are then largely determined by biological constraints. It takes about 7 months from the time a pullet is placed in the hatchery supply flock before the hen produces hatching-sized eggs. Typically, then, a hen will remain in the hatchery supply flock 7 to 8 months. Consequently, although there are no data on the size of the broiler hatchery supply flock, the cumulative placements of pullets into the hatchery supply flock 7 to 14 months earlier are a good indicator of the flock size.

Once the hatching eggs are available, market-weight broilers can be produced within 10 to 12 weeks. This allows 3 weeks for the eggs to hatch and 7 to 9 weeks for the broilers to reach market weights. These production lags are much shorter than for beef or pork production.

In addition to the shifts in production due to biological constraints and changes in profitability, seasonal effects in both supply and demand factors also are important. Weather-related stress can affect the efficiency of the laying flock at different times in the year which then affects production 3 months later. Weather-related stress can also affect the growth of the broilers after hatch. For a given size laying flock, summer stressful periods may reduce broiler supplies in the fall. The less stressful spring period results in a larger supply of hatching eggs for summer production of broilers. Laying rates of the flock also vary through the year, similarly implying seasonal effects on broiler production. For example, when egg production per layer is lowest in November through January, broiler production

is reduced 3 months later. Finally, the number of slaughter days per month affects measurements of monthly production, particularly in February.

Seasonal increases in demand tend to correspond to the barbecue and picnic season in April through September, especially near the Fourth of July. In addition, demand for chicken in the fast food sector, which has risen in recent years, is larger during the summer vacation months because of increased traveling. With turkey traditionally consumed on Thanksgiving, consumers tend to reduce purchases of other poultry in the fourth quarter of the year.

Finally, the efficiency of the laying flock has improved since more broilers per hen are being produced. This phenomenon is the result of numerous factors including improvements in breeding, better management practices throughout the production process, and improved broiler feeding/grow-out facilities.

Empirical Implementation

To quantitatively estimate the effects of these factors on broiler production, monthly data were used from 1972 through 1986, giving 180 observations. Broiler production is measured by slaughter (million head). The hatchery supply flock (million head) is represented by the cumulative placements of pullets into the flock 7 to 14 months earlier. This variable is further lagged by 3 months to account for the time required to hatch the eggs and feed the broilers to market weight. Economic incentives are represented by net returns to broiler production (cents per pound) deflated by the consumer price index (adjusted to a 1967 = 1.0 base) and also lagged by 3 months.

To represent the seasonal factors, the effects of the hatchery supply flock were allowed to vary through the year by including a separate variable for each month. These 12 separate hatchery supply flock variables directly reflect the seasonal factors on the supply side. As such, they measure the effects of weather on laying rates of the flock and growth rates of the broilers. They also account for the normal seasonality in laying rates through the year and the effects of slaughter day differences across months.

The 12 separate hatchery supply flock variables also indirectly represent seasonal adjustments by broiler producers in response to anticipated seasonal changes in demand through the year. To meet higher demand in the summer, producers may use more eggs for hatching in the spring, reducing exports or sales to breakers. Producers may also hatch smaller eggs than usual from hens younger than 7 months old or may retain hens in the hatchery supply flock beyond the fourteenth

Table 1--Monthly broiler slaughter equation

Variable	Coefficients
Net returns	4.72 (7.36)
Laying flock in:	
January	11.40 (45.36)
February	9.94 (40.30)
March	11.08 (45.53)
April	10.92 (45.02)
May	11.62 (48.00)
June	11.69 (48.19)
July	11.62 (47.88)
August	11.95 (49.49)
September	10.97 (44.60)
October	11.66 (46.38)
November	9.89 (39.24)
December	10.68 (42.33)
Interaction term: Trend times laying flock	0.176 (12.27)
R^2	0.88

Estimation period is 1972-1986; t-statistics are in parentheses below each coefficient. Net returns and laying flock variables are lagged 3 months.

month. When this occurs, the cumulative placements variable may under-represent the size of the producing flock during that time of the year, resulting in some production from those older hens being attributed to the 7- to 14-month old hens. Thus, the 12 monthly hatchery supply flock variables would, in part, capture the effects of seasonal changes in management practices and the possible inflation of the laying flock efficiency measure.

To represent the improvements in efficiency in the broiler sector, an interaction term was included, calculated by multiplying an annual trend variable (equal to 1 in 1972, 2 in 1973, and so forth) times the laying flock variable.

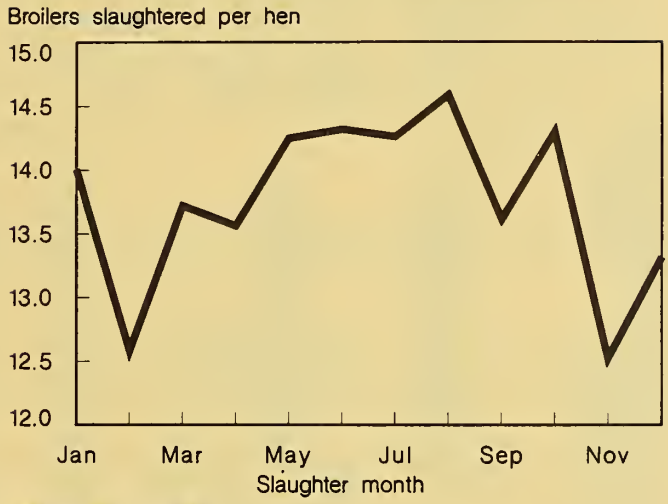
Results

Table 1 shows the estimated equation using the variables discussed above. The equation explains 88 percent of the variation in monthly broiler slaughter. All explanatory variables have the expected signs and all are statistically significant.

Using major components of net returns, the elasticity of slaughter with respect to broiler prices is 0.33, evaluated at variable means. The slaughter elasticity with respect to feed costs is estimated at -0.16. These results indicate an inelastic short-run supply response to changes in broiler prices and feed costs beyond what is already incorporated into the laying flock through longer-run expansion/contraction decisions.

A significant seasonal pattern in the effects of the laying flock on broiler slaughter is indicated by the coefficients of the 12 monthly flock size variables. Results show that production efficiency is generally highest in the summer months and lowest in the winter months. The results for the summer months reflect higher laying rates and less stressful weather in the spring as well as seasonal changes in producers' management practices to meet higher summer demand. The 2 lowest months are November and February. The November effect is due to the Thanksgiving decline in demand, the normal seasonal reduction in laying rates 3 months earlier, and, in some years, additional reductions in laying rates in August due to heat stress. The February effect accounts for the smaller

Figure 1
Laying Flock Effects on Broiler Slaughter



Seasonal pattern for 1986.

number of slaughter days that month and seasonally low laying rates 3 months earlier in November.

The coefficient of the trend/laying flock interaction term of 0.176 implies an efficiency gain in the relationship between the size of the hatchery supply flock and broiler production of about 1.3 percent each year, evaluated for 1986.

Figure 1 shows a plot of the seasonal effects of the laying flock on broiler slaughter. The seasonal effects correspond directly to the monthly laying flock coefficients and additionally include the effects of the trend/laying flock interaction term evaluated at 1986 levels.

The monthly laying flock coefficients in the equation along with the trend/laying flock interaction term imply 12.5 to 14.6 broilers slaughtered each month for each hen in the hatchery supply flock during 1986. With an average of about 18-1/2 eggs laid per month by each hen in the laying flock, and with about 75 to 80 percent of eggs laid actually hatching and broilers reaching market weights, the estimated coefficients correspond closely to observed broiler slaughter/flock size relationships.

Recent Performance and Current Outlook

Table 2 shows the performance of the estimated equation over the last 2 years compared with actual broiler slaughter. The

Table 2--Recent performance of the estimated broiler slaughter equation

Date	Actual	Predicted	Residual
	Million head		
1985			
January	375	355	20
February	325	332	-6
March	355	367	-12
April	388	376	12
May	397	394	3
June	361	385	-24
July	399	379	20
August	399	394	5
September	355	365	-10
October	406	375	32
November	326	328	-2
December	353	347	6
1986			
January	389	372	18
February	349	351	-2
March	360	383	-23
April	399	383	16
May	399	404	-6
June	392	400	-8
July	403	395	8
August	394	412	-18
September	399	387	13
October	408	418	-10
November	341	368	-27
December	410	382	28
Mean absolute error			14 (3.6%)

Number in parentheses is the mean absolute error expressed as a percent of the 1985-86 actual broiler slaughter.

mean absolute error over this period was about 14 million head, 3.6 percent of the average 1985-1986 slaughter.

Table 3 shows the equation's estimates of monthly broiler slaughter for 1987. These

Table 3--Equation estimates for 1987

Month	Broiler slaughter		Predicted change from year earlier
	Actual	Predicted	
	Million head		Percent
January	404	412	6
February	370	379	8
March	412	411	14
April	---	412	3
May	---	435	9
June	---	438	12
July	---	436	8
August	---	452	15
September	---	424	6
October	---	450	10
November	---	397	17
December	---	424	4

--- = Not available.

estimates use projections of net returns through the end of the year. Information needed regarding the size of the laying flock is already available since the flock size is based on the cumulative placements of pullets into the flock 7 to 14 months earlier which then affects broiler production an additional 3 months later.

Following last year's large decline in feed costs, broiler hatchery supply flocks began to be increased. The laying flock in the first quarter this year was 6 percent above year-earlier levels, and will be 11 and 15 percent higher than year-earlier levels in the second and third quarters, respectively. Based on the equation's monthly estimates, expected broiler slaughter in the second quarter of 1987 will be about 8 percent above last year. The monthly projections imply that third- and fourth-quarter broiler slaughter will be up nearly 10 percent.

Table 40--Total red meat supply and utilization by quarters, carcass and retail weight, 1982-86 1/

Year	Commercial production	Farm production	Beginning stocks	Imports	Total supply	Exports	Shipments	Military purchases	Ending stocks	Total disappearance	Per capita disappearance: Carcass weight	Per capita disappearance: Retail weight	Population
	- - - - Million pounds - - - -										- - Pounds - -		Million
BEEF:													
1982	22,366	170	257	1,939.18	24,732.18	249.74	55.30	135	294	23,998.13	104.28	77.17	230.3
1983	23,060	183	294	1,931.07	25,468.07	272.10	40.23	121	325	24,709.74	106.23	78.61	232.6
1984	23,418	180	325	1,823.08	25,746.08	328.76	47.26	112	358	24,900.06	106.05	78.48	234.8
1985													
I	5,692.0	60	358.0	419.6	6,529.6	81.6	12.34	28.3	334.0	6,073.4	25.7	19.0	236.2
II	5,923.0	26	334.0	537.3	6,820.3	77.1	11.99	29.9	296.0	6,405.3	27.0	20.0	236.8
III	6,167.0	25	296.0	632.6	7,120.6	91.3	11.64	29.5	308.0	6,680.2	28.1	20.8	237.4
IV	5,775.0	60	308.0	481.4	6,624.4	78.2	15.32	25.6	317.0	6,188.2	26.0	19.2	237.9
Year	23,557.0	171	358.0	2,070.9	26,156.9	328.2	51.3	113.3	317.0	25,347.1	106.9	79.1	237.0
1986													
I	5,769.0	55	317.0	501.7	6,643.0	101.7	12.90	24.5	297.1	6,206.8	26.0	19.3	238.5
II	6,246.0	23	297.1	482.0	7,048.8	82.7	11.70	32.9	321.6	6,599.9	27.6	20.4	239.1
III	6,273.0	23	321.6	640.0	7,258.3	143.5	14.20	29.2	291.6	6,779.8	28.3	20.9	239.6
IV	5,925.0	55	291.6	476.9	6,748.9	179.3	13.02	23.0	310.6	6,223.0	25.9	19.2	240.2
Year	24,213.0	158	317.0	2,100.6	26,788.6	507.2	51.8	109.6	310.6	25,809.4	107.8	79.8	239.4
1987													
I	5,755.0	55	311.0	500.0	6,621.0	155.0	15.0	35.0	310.0	6,106.0	25.4	18.8	240.8
Year	22,805.0	158	311.0	2,150.0	25,424.0	525.0	60.0	110.0	325.0	24,404.0	101.0	74.7	241.7
PORK:													
1982	14,121	108	264	612.11	15,105.11	214.29	151.16	96	219	14,424.66	62.63	59.00	230.30
1983	15,117	82	219	701.61	16,119.61	219.32	141.60	89	301	15,368.69	66.07	62.17	232.60
1984	14,720	92	301	953.92	16,066.92	163.85	147.00	86	274	15,396.07	65.57	61.76	234.80
1985													
I	3,618.0	28	274.0	313.1	4,233.1	33.8	32.74	17.3	314.0	3,835.2	16.2	15.3	236.2
II	3,743.0	11	314.0	287.7	4,355.7	37.2	33.48	20.5	385.0	3,879.5	16.4	15.4	236.8
III	3,553.0	12	385.0	264.8	4,214.8	25.4	28.06	18.5	277.0	3,865.9	16.3	15.3	237.4
IV	3,814.0	28	277.0	262.1	4,381.1	31.9	37.10	17.4	229.0	4,065.8	17.1	16.1	237.9
Year	14,728.0	79	274.0	1,127.8	16,208.8	128.4	131.4	73.7	229.0	15,646.4	66.0	62.0	237.0
1986													
I	3,570.0	22.75	229.0	279.2	4,101.0	15.6	33.30	16.0	253.5	3,782.6	15.9	14.9	238.5
II	3,568.0	9.75	253.5	246.6	4,077.9	28.1	30.00	21.0	247.7	3,751.2	15.7	14.7	239.1
III	3,237.0	9.75	247.7	281.6	3,776.0	14.7	27.80	19.0	185.9	3,528.5	14.7	13.8	239.6
IV	3,623.0	22.75	185.9	299.5	4,131.2	27.3	40.90	17.0	197.1	3,848.9	16.0	15.1	240.2
Year	13,998.0	65.00	229.0	1,107.0	15,399.0	85.6	132.0	73.0	197.1	14,912.0	62.3	58.6	239.4
1987													
I	3,540.0	23.0	197.0	300.0	4,060.0	20.0	35.0	20.0	223.0	3,762.0	15.6	14.7	240.8
Year	14,415.0	65.0	197.0	1,100.0	15,777.0	100.0	140.0	80.0	225.0	15,232.0	63.0	59.2	241.7
LAMB AND MUTTON:													
1982	356	9	11	18.67	394.67	1.72	2.42	1	9	380.52	1.65	1.47	230.30
1983	367	8	9	18.77	402.77	1.45	2.22	0	11	388.10	1.67	1.49	232.60
1984	371	8	11	20.00	410.00	1.93	2.83	0	7	398.24	1.70	1.51	234.80
1985													
I	93.0	2	7.0	4.6	106.6	0.3	0.67	0.0	7.0	98.7	0.4	0.4	236.2
II	83.0	1	7.0	11.0	102.0	0.2	0.58	0.00	9.0	92.2	0.4	0.3	236.8
III	85.0	1	9.0	6.5	101.5	0.2	0.68	0.0	9.0	91.6	0.4	0.3	237.4
IV	91.0	2	9.0	14.5	116.5	0.3	0.53	0.0	13.0	102.6	0.4	0.4	237.9
Year	352.0	6	7.0	36.5	401.5	1.0	2.5	0.0	13.0	385.0	1.6	1.4	237.0
1986													
I	90.0	2.45	13.0	10.3	115.8	0.4	0.62	0.1	11.8	102.9	0.4	0.4	238.5
II	78.0	1.05	11.8	10.5	101.4	0.3	0.44	0.1	14.1	86.5	0.4	0.3	239.1
III	81.0	1.05	14.1	8.1	104.2	0.3	0.53	0.1	14.5	88.9	0.4	0.3	239.6
IV	82.0	2.45	14.5	10.4	109.3	0.3	0.49	0.1	12.1	96.4	0.4	0.4	240.2
Year	331.0	7.00	13.0	39.3	390.3	1.2	2.1	0.3	12.1	374.7	1.6	1.4	239.4
1987													
I	76.0	3.0	12.0	10.0	101.0	0.0	0.0	0.0	14.0	87.0	0.4	0.3	240.8
Year	30.9	7.0	12.0	40.0	268.0	2.0	1.0	0.0	8.0	357.0	1.5	1.3	241.7

Continued--

Table 41--Poultry: Supply and utilization, 1985-87 1/

Year	Total production	Beginning stocks	Total supply	Exports	Shipments	Military purchases	Ending Stocks	Civilian disappearance	
								Total	Per capita 3/
	- - - - - - Million pounds - - - - - -								Pounds
Young chicken:									
1985 4/									
I	3,272.3	19.7	3,292.0	100.0	39.0	7.1	24.1	3,121.8	13.2
II	3,562.3	24.1	3,286.4	102.3	34.8	10.3	28.5	3,410.4	14.4
III	3,535.5	28.5	3,564.0	104.6	34.1	7.5	27.7	3,390.1	14.3
IV	3,391.5	27.7	3,419.2	110.0	35.0	8.9	26.6	3,238.8	13.6
Year	13,761.6	19.7	13,781.3	416.9	142.9	33.9	26.6	13,161.1	55.5
1986 4/									
I	3,419.3	26.6	3,445.9	120.8	36.0	7.2	23.8	3,258.1	13.7
II	3,687.2	23.8	3,711.0	135.1	34.0	11.0	23.3	3,507.6	14.7
III	3,634.5	23.3	3,657.8	131.9	41.5	9.5	25.0	3,449.9	14.4
IV	3,574.8	25.0	3,599.8	178.4	37.6	7.1	23.9	3,352.8	14.0
Year	14,315.8	26.6	14,342.4	566.2	149.2	34.9	23.9	13,568.3	56.7
1987 4/									
I	3,749.1	23.9	3,773.0				25.5		
Year 5/	15,553.0	23.9	15,576.9	750.0	140.0	36.0	25.0	14,626.0	60.5
Other chicken:									
1985 4/									
I	185.9	119.2	305.1	3.3	.2	.6	142.7	158.1	.7
II	161.8	142.7	304.5	4.7	.2	.4	143.7	155.4	.7
III	143.8	143.7	287.5	6.5	.1	.5	148.2	132.2	.6
IV	144.7	148.2	292.9	6.1	.8	.5	144.1	141.5	.6
Year	636.2	119.2	755.4	20.6	1.4	2.1	144.1	587.2	2.5
1986 4/									
I	162.0	144.1	306.1	3.4	.5	.4	160.7	141.0	.6
II	173.0	160.7	333.7	3.8	.6	.7	156.9	171.7	.7
III	148.3	156.9	305.2	4.4	.9	.5	147.3	152.1	.6
IV	145.9	147.3	293.2	4.6	.5	.4	163.1	124.6	.5
Year	629.3	144.1	773.4	16.3	2.6	2.0	163.1	589.3	2.5
1987 4/									
I	157.0	163.1					172.5		
Year 5/	601.0	163.1	764.1	20.0	4.0	1.0	130.0	609.0	2.5
Total chicken:									
1985 4/									
I	3,458.2	138.9	3,597.1	103.3	39.2	7.8	166.8	3,280.0	13.9
II	3,724.1	166.8	3,890.9	107.0	35.1	10.8	172.3	3,565.8	15.1
III	3,679.3	172.3	3,851.6	111.1	34.2	8.0	176.0	3,522.3	14.8
IV	3,536.2	176.0	3,712.2	116.1	35.8	9.4	170.6	3,380.3	14.2
Year	14,397.8	138.9	14,536.7	437.5	144.2	36.0	170.6	13,748.4	58.0
1986 4/									
I	3,581.3	170.6	3,751.9	124.2	36.5	7.6	184.5	3,399.0	14.2
II	3,860.3	184.5	4,044.8	138.8	34.6	11.7	180.2	3,679.3	15.4
III	3,782.9	180.2	3,963.1	136.3	42.4	10.0	172.3	3,602.0	15.0
IV	3,720.7	172.3	3,893.0	183.0	38.1	7.6	187.0	3,477.3	14.5
Year	14,945.1	170.6	15,115.7	582.5	151.7	36.9	187.0	14,157.6	59.1
1987 4/									
I	3,860.5	187.0	4,047.5				198.0		
Year 5/	16,154.0	187.0	16,341.0	770.0	144.0	37.0	155.0	15,235.0	63.0

(Continued)

Table 41--Poultry: Supply and utilization, 1985-87 1/--Continued

Year	Total production	Beginning stocks	Total supply	Exports	Shipments	Military purchases	Ending Stocks	Civilian disappearance	
								Total	Per capita 3/
	- - - - - - Million pounds - - - - - -								Pounds
Turkey:									
1985 4/									
I	506.1	125.3	631.4	6.1	0.7	2.4	131.1	491.2	2.1
II	660.0	131.1	791.1	4.6	1.0	2.7	243.3	539.5	2.3
III	898.4	243.3	1,141.7	7.3	1.0	4.4	444.5	684.6	2.9
IV	877.6	444.5	1,322.1	9.3	3.9	3.5	150.2	1,155.2	4.9
Year	2,942.2	125.3	3,067.5	27.2	6.6	13.0	150.2	2,870.5	12.1
1986 4/									
I	581.1	150.2	731.3	4.8	.3	1.5	150.5	574.1	2.4
II	750.2	150.5	900.7	5.3	.1	1.8	297.8	595.8	2.5
III	981.7	297.8	1,279.5	6.7	.8	5.3	511.6	755.1	3.2
IV	958.3	511.6	1,469.9	9.8	3.1	1.9	178.2	1,276.9	5.3
Year	3,271.4	150.2	3,421.6	26.6	4.4	10.5	178.2	3,201.9	13.4
1987 4/									
I	692.5	178.2	870.7				228.7		
Year 5/	3,826.0	178.2	4,004.2	25.0	4.0	16.0	180.0	3,780.0	15.6
Total poultry:									
1985 4/									
I	3,964.3	264.2	4,228.5	109.4	39.9	10.2	297.9	3,771.2	16.0
II	4,384.1	297.9	4,682.0	111.6	36.0	13.5	415.5	4,105.3	17.3
III	4,577.7	415.5	4,993.2	118.4	35.2	12.4	620.4	4,206.8	17.7
IV	4,413.8	620.4	5,034.2	125.3	39.6	12.9	320.8	4,535.5	19.1
Year	17,340.0	264.2	17,604.2	464.7	150.8	49.0	320.8	16,618.9	70.1
1986 4/									
I	4,162.3	320.8	4,483.1	129.1	36.9	9.1	335.0	3,973.1	16.7
II	4,610.5	335.0	4,945.5	144.2	34.7	13.5	478.0	4,275.0	17.9
III	4,764.6	478.0	5,242.6	143.1	43.2	15.3	683.8	4,357.2	18.2
IV	4,679.0	683.8	5,362.8	192.8	41.3	9.5	365.2	4,754.2	19.8
Year	18,218.5	320.8	18,539.3	609.1	156.1	47.4	365.2	17,359.5	72.5
1987 4/									
I	4,598.6	365.2					426.7		
Year 5/	19,981.0	365.2	20,346.2	795	148	53	335	19,015.	78.7

1/ Totals may not add because of rounding. 2/ Total production is estimated by multiplying the federally inspected slaughter by the ratio of the annual total production to the annual federally inspected slaughter. The ratio for 1985 is the same as in 1984. 3/ Calculated from unrounded data. 4/ Preliminary. 5/ Forecast.

Table 42--Total red meat and poultry supply and utilization, 1982-87 1/

Year	Total pro-duction	Beginning stocks	Imports	Total supply	Exports and shipments	Military	Ending stocks	Total civilian disappear-ance	Per capita disappear-ance
				Million pounds					Pounds
1982									
Year	53,011	929	2,589	56,529	1,410	286	868	53,965	203.1
1983									
I	13,057	868	720	14,645	321	64	870	13,389	50.0
II	13,623	870	704	15,197	339	74	950	13,834	51.8
III	14,018	950	717	15,684	309	71	1,066	14,238	52.9
IV	14,338	1,067	530	15,935	359	57	921	14,599	54.5
Year	55,036	868	2,670	58,574	1,328	267	921	56,060	209.1
1984									
I	13,461	921	685	15,066	328	53	946	13,740	50.9
II	13,891	946	633	15,470	306	80	1,072	14,011	52.0
III	13,892	1,072	783	15,746	333	63	1,114	14,236	52.6
IV	14,432	1,114	721	16,268	345	55	917	14,951	55.4
Year	55,676	921	2,821	59,418	1,312	251	917	56,938	210.9
1985									
I	13,582.3	917.2	742.2	15,241.7	311.7	56.8	963.9	13,909.4	51.1
II	14,293.1	963.9	841.8	16,098.8	309.2	65.9	1,116.5	14,607.1	53.5
III	14,548.7	1,116.5	906.6	16,571.8	312.3	62.3	1,224.4	14,972.7	54.6
IV	14,323.8	1,224.4	764.3	16,312.5	329.3	57.5	890.8	15,034.8	55.3
Year	56,748.0	917.2	3,254.8	60,920.0	1262.6	242.6	890.8	58,524.1	214.5
1986									
I	13,806.3	890.8	798.7	15,495.7	331.6	51.0	907.8	14,205.2	51.7
II	14,668.5	907.8	743.0	16,319.1	333.2	69.2	1,070.4	14,846.3	53.9
III	14,521.6	1,070.4	933.7	16,525.5	389.4	65.3	1,183.2	14,887.6	53.8
IV	14,517.0	1,182.2	798.2	16,498.2	496.1	50.7	891.8	15,059.8	54.9
Year	57,514.6	890.8	3,273.7	61,679.0	1,207.1	236.2	891.8	58,998.9	214.1
1987									
I	14,169.6	892.2	817.0	15,878.8	426.0	67.0	979.7	14,397.0	52.1
Year	58,194.0	892.2	3,315.0	62,401.2	1,776.0	250.0	900.0	59,475.0	215.6

1/ Totals may not add due to rounding. 2/ Preliminary. 3/ Forecast.

Table 43--Beef, Choice Yield Grade 3: Retail, carcass, and farm values, spreads, and farmers' share 1/

Year	Retail price 2/	Gross carcass value 3/	Carcass by-product allowance 4/	Net carcass value 5/	Gross farm value 6/	Farm by-product allowance 7/	Net farm value 8/	Farm-retail spread			Farmers' share 9/
								Total	Carcass-retail	Farm-carcass	
	- - - Cents per pound - - -										Percent
1980	237.6	157.7	2.3	155.4	161.9	16.9	145.0	92.6	82.2	10.4	61
1981 10/	238.7	151.5	2.1	149.3	154.5	16.0	138.5	100.2	89.4	10.8	58
1982	242.5	152.8	2.1	150.7	155.5	15.0	140.5	102.0	91.8	10.2	58
1983	238.1	147.4	2.0	145.4	151.8	15.6	136.2	101.9	92.7	9.2	57
1984	239.6	150.6	3.0	147.6	158.6	18.6	140.0	99.6	92.0	7.6	58
1985	232.6	137.0	1.8	135.2	142.2	15.4	126.8	105.8	97.4	8.4	55
1986											
Jan.	236.9	140.0	1.4	138.6	144.5	16.1	128.4	108.5	98.3	10.2	54
Feb.	232.5	131.4	1.4	130.0	136.5	15.5	121.0	111.5	102.5	9.0	52
Mar.	230.3	129.2	1.1	128.1	134.9	15.1	119.8	110.5	102.2	8.3	52
1st qt.	233.2	133.5	1.3	132.2	138.6	15.5	123.1	110.1	101.0	9.1	53
Apr.	227.0	126.2	1.0	125.2	131.2	15.0	116.2	110.8	101.8	9.0	51
May	226.8	130.6	.9	129.7	135.7	15.3	120.4	106.4	97.1	9.3	53
June	226.6	126.6	.9	125.7	128.2	14.9	113.3	113.3	100.9	12.4	50
2nd qt.	226.8	127.8	.9	126.9	131.7	15.1	116.6	110.2	99.9	10.3	51
July	227.4	134.6	1.2	133.4	140.9	16.0	124.9	102.5	94.0	8.5	55
Aug.	230.2	136.7	1.1	135.6	143.6	15.4	128.2	102.0	94.6	7.4	56
Sept.	231.0	136.9	1.1	135.8	144.1	15.1	129.0	102.0	95.2	6.8	56
3rd qt.	229.5	136.1	1.2	134.9	142.9	15.5	127.4	102.2	94.6	7.6	56
Oct.	231.2	138.4	1.3	137.1	144.9	16.0	128.9	102.3	94.1	8.2	56
Nov.	233.8	143.0	1.3	141.7	150.5	16.4	134.1	99.7	92.1	7.6	57
Dec.	234.8	137.7	1.4	136.3	145.2	16.9	128.3	106.5	98.5	8.0	55
4th qt.	233.3	139.7	1.3	138.4	146.8	16.4	130.4	102.9	94.9	8.0	59
Annual	230.7	134.3	1.2	133.1	140.0	15.6	124.4	106.3	97.6	8.7	54
1987											
Jan.	236.6	135.5	1.4	134.0	142.8	17.1	125.7	110.9	102.6	8.3	53
Feb.	233.6	138.9	1.4	137.5	149.5	17.8	131.7	101.9	96.1	5.8	56
Mar.	233.6	140.7	1.2	139.5	151.4	18.0	133.4	100.2	94.1	6.1	54
1st qtr.	234.6	138.4	1.4	137.0	147.9	17.6	130.3	104.3	97.6	6.7	56

1/ Revised series. 2/ Estimated weighted-average price of retail cuts from Choice Yield Grade 3 carcass. 3/ Value of carcass-quantity equivalent to 1 lb. of retail cuts. A wholesale-carcass equivalent of 1.464 was used prior to 1970; it was increased gradually to 1.476 in 1976 and later years. 4/ Portion of gross carcass value attributed to fat and bone trim. 5/ Gross carcass value minus carcass by-product allowance. 6/ Market value to producer for 2.4 lb. of live animal, equivalent to 1 lb. of retail cuts. 7/ Portion of gross farm value attributed to edible and inedible by-products. 8/ Gross farm value minus farm by-product allowance. 9/ Percent net farm value is of retail price. 10/ ERS data through May 1981, BLS series since.

Table 44--Pork: Retail, wholesale, and farm values, spreads, and farmers' share 1/

Year	Retail price 2/	Wholesale value 3/	Gross farm value 4/	By-product allowance 5/	Net farm value 6/	Farm-retail spread			Farmers' share 7/
						Total	Wholesale-retail	Farm-wholesale	
	- - - Cents per pound - - -								Percent
1980	139.4	98.0	68.3	5.1	63.2	76.2	41.4	34.8	45
1981 8/	152.4	106.7	75.5	5.2	70.3	82.1	45.7	36.4	46
1982	175.4	121.8	94.3	6.3	88.0	87.4	53.6	33.8	50
1983	169.8	108.9	81.4	4.9	76.5	93.3	60.9	32.4	45
1984	162.0	110.1	83.3	5.9	77.4	84.6	51.9	32.7	48
1985	162.0	101.1	76.2	4.8	71.4	90.6	60.9	29.7	44
1986									
Jan.	169.0	99.1	77.6	4.7	72.9	96.1	69.9	26.2	43
Feb.	168.3	95.7	74.1	4.6	69.5	98.8	72.6	26.2	41
Mar.	165.8	92.4	69.5	4.0	65.5	100.3	73.4	26.9	40
1st qt.	167.7	95.7	73.7	4.4	69.3	98.4	72.0	26.4	41
Apr.	162.2	91.7	68.8	4.0	64.8	97.4	70.5	26.9	40
May	162.3	102.8	80.8	4.2	76.6	85.7	59.5	26.2	47
June	166.5	112.2	94.6	4.8	89.8	76.7	54.3	22.4	54
2nd qt.	163.7	102.2	81.4	4.3	77.1	86.6	61.5	25.1	47
July	183.4	127.4	103.5	5.6	97.9	85.5	56.0	29.5	53
Aug.	190.3	131.9	107.9	5.9	102.0	88.3	58.4	29.9	54
Sept.	194.4	127.3	101.4	5.7	95.7	98.7	67.1	31.6	49
3rd qt.	189.4	128.9	104.3	5.7	98.5	90.9	60.5	30.4	52
Oct.	194.9	118.5	92.2	5.5	86.7	108.2	76.4	31.8	44
Nov.	192.5	118.4	91.2	5.1	86.1	106.4	74.1	32.3	45
Dec.	191.3	113.5	86.6	5.2	81.4	109.9	77.8	32.1	43
4th qt.	192.9	116.8	90.0	5.3	84.7	108.2	76.1	32.1	44
Annual	178.4	110.9	87.3	4.9	82.4	96.0	67.5	28.5	46
1987									
Jan.	188.1	105.4	80.7	5.0	75.7	112.4	82.7	29.7	40
Feb.	185.6	103.8	82.9	5.1	77.8	107.8	81.8	26.0	42
Mar.	181.3	102.2	81.7	4.9	76.8	104.5	79.1	25.4	42
1st qt.	185.0	103.8	81.8	5.0	76.8	108.2	81.2	27.0	41

1/ Revised series. 2/ Estimated weighted-average price of retail cuts from pork carcass. 3/ Value of wholesale quantity equivalent to 1 lb. of retail cuts. A wholesale-carcass equivalent of 1.06 is used for all years. 4/ Market values to producer for 1.7 lb. of live animal, equivalent to 1 lb. of retail cuts. 5/ Portion of gross farm value attributable to edible and inedible by-products. 6/ Gross farm value minus by-product allowance. 7/ Percent net farm value is of retail price. 8/ ERS data through May 1981, BLS series since.

Table 45--Average retail price of specified meat cuts, per pound, by months

Year and item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Dollars						
CHOICE BEEF:												
Ground chuck												
1985	1.71	1.73	1.72	1.72	1.69	1.67	1.65	1.64	1.64	1.62	1.67	1.68
1986	1.66	1.66	1.66	1.63	1.59	1.60	1.61	1.62	1.64	1.65	1.66	1.65
1987	1.69	1.65	1.68									
Ground beef												
1985	1.28	1.28	1.28	1.27	1.21	1.20	1.20	1.21	1.21	1.19	1.24	1.28
1986	1.28	1.26	1.27	1.22	1.19	1.16	1.19	1.22	1.23	1.23	1.28	1.26
1987	1.30	1.27	1.28									
Chuck roast, bone in												
1985	1.68	1.70	1.65	1.62	1.58	1.55	1.50	1.48	1.41	1.50	1.56	1.63
1986	1.68	1.64	1.65	1.53	1.54	1.53	1.50	1.54	1.50	1.58	1.66	1.68
1987	1.68	1.64	1.63									
Round roast, boneless												
1985	2.56	2.52	2.56	2.54	2.45	2.40	2.41	2.34	2.35	2.39	2.49	2.56
1986	2.55	2.47	2.46	2.41	2.44	2.33	2.39	2.40	2.46	2.49	2.47	2.47
1987	2.54	2.47	2.49									
Rib roast, bone in												
1985	3.43	3.28	3.32	3.29	3.30	3.29	3.27	3.24	3.19	3.20	3.21	3.37
1986	3.36	3.33	3.20	3.29	3.16	3.21	3.19	3.29	3.28	3.18	3.31	3.39
1987	3.44	3.44	3.37									
Round steak, boneless												
1985	2.94	2.94	2.95	2.90	2.88	2.84	2.76	2.68	2.67	2.69	2.78	2.83
1986	2.91	2.82	2.82	2.75	2.74	2.74	2.66	2.69	2.76	2.79	2.75	2.80
1987	2.80	2.80	2.76									
Sirloin steak, bone in												
1985	2.98	2.97	2.99	2.96	3.00	3.08	3.06	2.94	2.87	2.82	2.84	2.98
1986	2.90	2.97	2.84	2.90	2.99	3.01	3.07	3.01	3.01	2.94	2.91	2.93
1987	2.81	2.96	2.87									
Chuck steak, bone in												
1985	1.72	1.74	1.71	1.66	1.62	1.54	1.53	1.56	1.54	1.60	1.68	1.74
1986	1.72	1.58	1.62	1.52	1.48	1.50	1.47	1.60	1.55	1.62	1.69	1.69
1987	1.71	1.65	1.64									
T-Bone steak, bone in												
1985	3.96	3.97	3.98	4.03	3.98	4.09	4.10	3.91	3.87	3.78	3.86	4.05
1986	3.99	3.91	3.87	3.90	3.96	3.99	4.06	4.11	4.09	3.85	3.92	3.97
1987	3.86	3.79	3.83									
Porterhouse steak, bone in												
1985	4.10	4.04	4.00	4.04	4.04	4.04	4.22	4.03	4.05	3.98	3.91	4.04
1986	4.08	3.96	3.92	3.96	4.16	4.22	4.29	4.29	4.28	4.26	4.29	4.17
1987	4.22	4.19	4.22									
PORK												
Bacon, sliced												
1985	1.95	1.97	1.96	1.95	1.93	1.89	1.95	1.96	1.93	1.95	1.93	1.92
1986	1.94	1.96	1.89	1.87	1.87	1.95	2.16	2.33	2.37	2.30	2.19	2.16
1987	2.12	2.09	2.10									
Chops, center cut												
1985	2.37	2.41	2.35	2.27	2.24	2.31	2.35	2.34	2.34	2.30	2.38	2.39
1986	2.47	2.42	2.38	2.36	2.40	2.48	2.76	2.81	2.82	2.74	2.72	2.75
1987	2.72	2.70	2.64									

Continued--

Table 45--Average retail price of specified meat cuts, per pound, by months--Continued

Year and item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Dollars						
Ham, rump or shank half												
1985	1.36	1.32	1.34	1.22	1.27	1.24	1.24	1.26	1.25	1.27	1.29	1.36
1986	1.38	1.42	1.38	1.30	1.32	1.33	1.46	1.52	1.58	1.66	1.68	1.63
1987	1.60	1.59	1.50									
Sirloin roast, bone in												
1985	1.68	1.63	1.60	1.55	1.54	1.50	1.62	1.58	1.54	1.58	1.61	1.65
1986	1.66	1.65	1.65	1.64	1.65	1.67	1.90	1.89	1.89	1.89	1.87	1.91
1987	1.90	1.82	1.81									
Shoulder picnic, bone in												
1985	1.06	1.03	1.04	1.04	.99	.98	1.01	1.03	1.00	1.01	1.02	1.07
1986	1.06	1.03	1.00	1.00	.96	.99	1.01	1.12	1.14	1.18	1.18	1.18
1987	1.15	1.11	1.06									
Sausage, fresh, pork, loose												
1985	1.72	1.78	1.77	1.74	1.75	1.73	1.75	1.74	1.72	1.66	1.69	1.78
1986	1.84	1.79	1.86	1.78	1.77	1.76	1.85	1.94	2.05	2.10	2.07	2.05
1987	2.01	2.02	1.99									
MISCELLANEOUS CUTS												
Ham, canned, 3 or 5 lbs												
1985	2.64	2.66	2.70	2.55	2.57	2.53	2.52	2.52	2.51	2.51	2.50	2.49
1986	2.56	2.68	2.58	2.57	2.55	2.57	2.58	2.64	2.70	2.82	2.94	2.92
1987	2.84	2.85	2.82									
Frankfurters, all meat												
1985	1.81	1.83	1.82	1.80	1.81	1.81	1.77	1.77	1.83	1.86	1.82	1.83
1986	1.91	1.92	1.88	1.85	1.87	1.89	1.91	1.96	2.00	1.99	1.98	2.02
1987	1.98	1.99	1.96									
Bologna												
1985	2.12	2.10	2.11	2.15	2.13	2.12	2.11	2.09	2.13	2.11	2.07	2.12
1986	2.14	2.09	2.12	2.12	2.10	2.11	2.15	2.19	2.23	2.25	2.27	2.27
1987	2.22	2.17	2.19									
Beef liver												
1985	.95	.96	.97	.96	.94	.98	.96	.95	.94	.93	.95	1.04
1986	.99	.96	.95	.97	.96	.97	.98	.94	.95	.98	1.01	1.01
1987	1.02	1.00	1.03									

Table 46--Selected price statistics for meat animals and meat

Item	Apr.	May	June	II	July	Aug.	Sept.	III	Oct.	Nov.	Dec.	IV	Jan.	Feb.	Mar.	I
	1986												1987			
	Dollars per cwt															
SLAUGHTER STEERS:																
Omaha:																
Choice, 900-1100 lb	53.68	55.79	54.08	54.52	58.27	59.04	59.43	58.91	59.73	61.54	59.82	60.36	58.79	61.02	NA	NA
Good, 900-1100 lb	49.13	48.78	47.64	48.52	50.55	52.27	53.66	52.16	54.96	56.23	53.87	55.07	52.88	55.23	NA	NA
California, Choice 900-1100 lb	55.90	56.90	53.88	55.56	56.55	59.00	59.06	58.20	59.70	61.38	60.10	60.39	60.19	53.45	NA	NA
Colorado, Choice 900-1100 lb	55.52	57.27	55.83	56.21	58.99	59.87	60.71	59.86	62.04	63.47	60.58	62.03	60.17	63.62	NA	NA
Texas, Choice 900-1100 lb	55.91	57.95	55.81	56.56	59.28	59.84	60.44	59.85	61.90	63.73	61.45	62.36	60.61	64.09	NA	NA
SLAUGHTER HEIFERS:																
Omaha:																
Choice, 900-1100 lb	53.30	55.72	54.30	54.44	58.03	56.16	59.38	57.86	59.51	61.80	59.72	60.34	58.18	60.74	NA	NA
Good, 700-900 lb	49.67	51.54	49.50	50.24	52.83	54.02	54.33	53.73	54.81	56.44	54.48	55.24	53.83	56.08	NA	NA
COWS:																
Omaha:																
Commercial	35.09	37.15	38.30	36.85	37.97	38.09	38.88	38.31	37.80	35.78	35.79	36.46	40.45	43.07	NA	NA
Utility	35.95	37.91	38.77	37.54	38.32	37.62	38.42	38.12	37.32	35.88	35.48	36.23	39.79	42.29	NA	NA
Cutter	35.05	37.46	37.80	36.10	37.40	36.59	36.91	36.97	35.52	34.32	33.47	34.44	37.49	40.24	NA	NA
Canner	31.92	33.81	34.31	33.35	33.71	32.30	33.43	33.15	32.48	31.01	29.89	31.13	33.28	35.02	NA	NA
VEALERS:																
Choice, So. St. Paul	55.00	55.83	61.10	57.31	62.13	62.50	67.50	64.04	67.50	67.50	67.50	67.50	65.94	68.28	NA	NA
FEEDER STEERS: 1/																
Kansas City:																
Medium No. 1, 400-500 lb	69.20	68.95	65.13	67.76	67.20	71.13	72.88	70.40	70.00	68.50	69.40	69.30	73.38	76.38	NA	NA
Medium No. 1, 600-700 lb	60.32	60.40	58.50	59.74	61.00	65.75	65.50	64.08	65.10	64.13	65.00	64.73	69.00	71.38	NA	NA
All weights and grades	56.68	62.21	53.69	57.53	57.98	62.20	61.51	60.56	61.94	62.77	62.83	62.51	65.75	69.01	NA	NA
Amarillo:																
Medium No. 1, 600-700 lb	55.15	54.28	54.88	54.77	61.08	63.63	63.50	62.74	61.65	62.75	63.58	62.66	66.47	70.31	NA	NA
Georgia auctions:																
Medium No. 1, 600-700 lb	57.62	53.25	52.75	54.54	56.50	58.00	59.38	57.96	56.40	57.33	57.33	57.02	62.38	65.88	NA	NA
Medium No. 2, 400-500 lb	60.00	54.75	54.62	56.46	57.75	58.75	60.50	59.00	59.30	58.33	58.33	58.65	62.50	68.38	NA	NA
FEEDER HEIFERS:																
Kansas City:																
Medium No. 1, 400-500 lb	59.04	58.50	55.50	57.68	57.30	60.75	63.25	60.43	60.70	58.88	59.80	59.79	65.13	69.13	NA	NA
Medium No. 1, 600-700 lb	53.32	51.05	50.00	51.46	56.10	59.25	60.75	58.70	59.65	58.25	59.20	59.03	63.19	65.13	NA	NA
SLAUGHTER HOGS:																
Barrows and gilts:																
Omaha:																
No. 1 & 2, 210-240 lb	41.15	48.62	55.37	48.38	61.88	63.76	60.51	62.05	55.35	55.04	53.49	54.63	49.31	49.71	NA	NA
All weights	40.15	46.99	54.41	47.18	60.88	63.11	59.21	61.07	54.67	53.73	51.25	53.22	47.33	48.68	NA	NA
Sioux City	40.59	47.47	54.95	47.42	61.59	63.66	59.59	61.61	54.86	54.44	52.02	53.77	47.56	48.73	NA	NA
7 markets 2/	40.27	46.91	54.50	47.14	60.99	63.39	59.01	61.13	54.21	53.62	51.42	53.08	47.39	48.73	NA	NA
Sows:																
7 markets 2/	38.91	41.57	45.97	42.11	50.86	55.98	55.59	54.14	50.25	48.03	42.91	47.06	43.94	42.38	NA	NA
FEEDER PIGS:																
No. 1 & 2, So. Mo., 40-50 lb (per hd.)	37.98	39.97	41.92	39.96	50.76	56.64	59.63	55.68	53.23	50.00	47.69	50.31	47.00	53.96	NA	NA

Continued--

Table 47--Selected marketings, slaughter, and stock statistics for meat animals and meat

Item	1986												1987			
	Apr.	May	June	II	July	Aug.	Sept.	III	Oct.	Nov.	Dec.	IV	Jan.	Feb.	Mar.	I
								1,000 head								
FEDERALLY INSPECTED:																
Slaughter																
Cattle	3,096	3,123	3,017	9,236	3,213	3,101	3,019	9,333	3,164	2,693	2,944	8,801	3,084	2,564	2,805	8,453
Steers	1,485	1,454	1,467	4,406	1,504	1,449	1,447	4,400	1,527	1,232	1,339	4,098	1,476	1,237	1,365	4,078
Heifers	892	938	889	2,719	971	977	924	2,872	897	757	837	2,491	970	794	862	2,626
Cows	666	669	600	1,935	675	615	587	1,877	677	649	714	2,040	586	484	523	1,593
Bulls and stags	52	63	60	175	63	60	62	185	63	54	53	170	53	49	56	158
Calves	284	257	240	781	281	262	263	806	276	239	272	787	248	225	251	724
Sheep and lambs	477	417	406	1,300	432	426	495	1,353	495	401	442	1,338	418	390	432	1,240
Hogs	7,160	6,703	5,894	19,757	5,918	5,799	6,323	18,040	7,083	6,064	6,558	19,705	6,723	5,886	6,786	19,395
								Percent								
Percentage sows	3.9	4.3	5.1	4.4	5.8	5.5	4.9	5.4	4.2	4.4	5.1	4.6	3.9	4.0	3.7	3.9
								Pounds								
Average live wt:																
per head:																
Cattle	1,115	1,107	1,098	1,107	1,095	1,095	1,107	1,099	1,108	1,104	1,105	1,104	1,114	1,113	1,111	1,113
Calves	240	248	249	246	242	238	241	240	239	229	228	237	240	241	232	237
Sheep and lambs	118	117	116	117	114	114	117	115	119	119	122	120	118	119	122	120
Hogs	246	246	246	245	245	244	245	245	248	250	252	250	251	248	246	248
Average dressed wt:																
Beef	663	658	654	658	652	654	662	656	660	648	648	652	663	663	633	663
Veal	146	151	153	150	148	145	146	147	146	139	139	141	145	147	141	144
Lamb and mutton	60	59	58	59	57	58	59	58	60	60	61	60	60	60	62	182
Pork	177	177	176	177	175	174	176	175	178	180	181	180	181	177	177	178
Production:																
Beef	2,044	2,047	1,967	6,058	2,086	2,020	1,990	6,096	2,079	1,741	1,900	5,720	2,038	1,693	1,851	5,582
Veal	41	38	36	115	41	38	38	117	39	32	37	108	35	32	35	102
Lamb and mutton	28	24	23	75	25	24	29	78	30	24	27	81	25	23	26	74
Pork	1,261	1,180	1,035	3,476	1,034	1,009	1,107	3,150	1,247	1,083	1,181	3,511	1,211	1,042	1,196	3,449
COMMERCIAL: 1/								1,000 head								
Slaughter:																
Cattle	3,214	3,234	3,123	9,574	3,322	3,203	3,128	9,653	3,285	2,819	3,076	9,180	3,199	2,662	2,904	8,765
Calves	303	276	257	836	300	278	281	859	295	256	289	839	263	239	266	768
Sheep and Lambs	493	432	420	1,342	448	443	511	1,402	511	413	454	1,377	428	400	442	1,270
Hogs	7,353	6,888	6,076	20,314	6,098	5,972	6,504	18,572	7,279	6,255	6,796	20,271	6,917	6,055	6,966	19,938
								Million pounds								
Production:																
Beef	2,111	2,109	2,027	6,247	2,148	2,077	2,050	6,275	2,146	1,808	1,971	5,925	2,102	1,747	1,907	5,756
Veal	45	43	41	129	45	42	43	130	44	37	41	122	39	36	38	113
Lamb and mutton	29	25	24	78	25	25	30	80	30	24	27	81	25	24	27	76
Pork	1,292	1,210	1,065	3,567	1,063	1,037	1,137	3,237	1,279	1,115	1,220	3,614	1,244	1,070	1,226	3,540
COLD STORAGE STOCKS								Million pounds								
END OF QUARTER: 2/ 3/																
Beef	301	318	322	322	337	319	292	292	292	297	311	311	321	306	310	310
Veal	10	9	9	9	9	8	7	7	8	7	7	7	7	7	6	6
Lamb and mutton	13	13	14	14	14	15	14	14	14	14	13	13	12	14	14	14
Pork	282	276	248	248	215	185	186	186	216	206	197	197	218	229	223	223
Total meat	661	670	641	641	620	565	499	499	531	524	527	527	598	599	596	596

1/ Federally inspected and other commercial. 2/ Beginning January 1977, excludes beef and pork stocks in cooler. 3/ Stock levels end of quarter or month.

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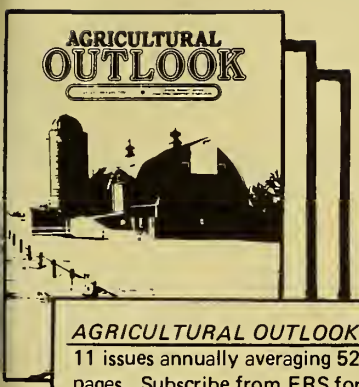

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